Santa Clara Valley Water District

Fiscal Years 2018-22
Capital Improvement Program

BOARD OF DIRECTORS

John L. Varela
Chair, District 1

Barbara Keegan
District 2

Richard P. Santos
Vice Chair, District 3

Linda J. LeZotte
District 4

Nai Hsueh
District 5

Tony Estremera
District 6

Gary Kremen
District 7

Submitted by

Norma J. Camacho
Interim Chief Executive Officer

Presented by

Ngoc Nguyen
Interim Deputy Operating Officer

May 9, 2017

Santa Clara Valley Water District

Table of Contents

OVERVIEW

Overview I-1
Alignment with Ends Policies I-2
CIP Planning Process I-2
Fiscal Year 2018-22 CIP Summary I-6

WATER SUPPLY CAPITAL IMPROVEMENTS

Water Supply Overview II-1
Priority Process and Financial Analysis II-2
Water Supply Capital Improvements II-4
Water Supply Funding Source II-5
Water Supply Project Pages
- Storage Facilities II-7
- Transmission Facilities II-21
- Treatment Facilities II-43
- Recycled Water Facilities II-59

FLOOD PROTECTION CAPITAL IMPROVEMENTS

Flood Protection Overview III-1
Priority Process and Financial Analysis III-2
Flood Protection Capital Improvements & Funding Sources III-3
Flood Protection Project Pages
- Lower Peninsula Watershed III-5
- West Valley Watershed III-11
- Guadalupe Watershed III-15
- Coyote Watershed III-17
- Uvas/Llagas Watershed III-31
- Multiple Watersheds III-35

WATER RESOURCES STEWARDSHIP CAPITAL IMPROVEMENTS

Water Resources Stewardship Overview IV-1
Priority Process and Financial Analysis IV-2
Water Resources Stewardship Capital Improvements & Funding Sources IV-3
Water Resources Stewardship Project Pages
- Environmental Enhancements & Stewardship
  - Lower Peninsula Watershed IV-5
  - Guadalupe Watershed IV-9
  - Multiple Watersheds IV-11
- Feasibility Studies IV-19
- Mitigation IV-21

Table of Contents

BUILDINGS AND GROUNDS CAPITAL IMPROVEMENTS

Buildings and Grounds Overview.....V-1
Priority Process and Financial Analysis.....V-1
Buildings and Grounds Capital Improvements & Funding Sources V-2
Buildings and Grounds Projects Pages V-3

INFORMATION TECHNOLOGY CAPITAL IMPROVEMENTS

Information Technology Overview VI-1
Priority Process and Financial Analysis..... VI-1
Information Technology Capital Improvements & Funding Sources..... VI-2
Information Technology Projects Pages..... VI-3

FINANCIAL PLANNING AND SUMMARY

CIP Financial Planning VII-1
CIP Funding Summary VII-5
Project Funding Schedules
- Water Utility Enterprise Fund.....VII-6
- Watershed and Stream Stewardship Fund VII-8
- Safe, Clean Water and Natural Flood Protection Fund VII-9
- General Fund.....VII-10
- Information Technology Fund VII-10
- All Funds.....VII-10

APPENDICES

Appendix A – CIP Priority Criteria.....VIII-1
Appendix B – Project List by Priority VIII-7
Appendix C – District Partnership Summary List.....VIII-11
Appendix D – Summary of Capital Expenditures VIII-15
Appendix E – Safe Clean Water Project Schedules.....VIII-17
Appendix F – Glossary VIII-19

Overview

OVERVIEW

The Santa Clara Valley Water District's (District) Fiscal Year 2018-22 Five-Year Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects from Fiscal Year 2017-18 through Fiscal Year 2021-22. The purpose of the CIP is to document planned District projects to help integrate District work with the larger community by aligning District planning with other local agency planning efforts.

The District's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within the District boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water related infrastructure to meet the needs of Santa Clara County.

SANTA CLARA VALLEY WATER

Mission

The mission of the district is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officer Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and Public Contract Code definition of public works. They exceed $50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories.

1. Acquisition of land for public purpose
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building
3. Addition to or expansion of an existing facility
4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than $50,000
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than $1.5 million
2. Project can be completed within 2 fiscal years
3. Rights-of-Way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Almaden Campus Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by the District that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of vehicles and large equipment.

ALIGNMENT WITH ENDS POLICIES

The District plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under the District's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by District staff. Balancing the Ends Policies are the Executive Limitations, which set limits on staff activities in fulfilling the Ends.

Program plans or master plans are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operation staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Som high profile feasibility studies are included in the CIP. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures the District's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP.

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations.
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
  - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
  - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

CIP PLANNING PROCESS

The District conducts an annual planning process for its Capital Improvement Program. The purpose of the planning process is to ensure the capital projects included in the CIP:

- Meet the Board's priorities and contribute to the objectives of the District's various programs
- Have identified funding for the duration of the projects
- Are coordinated with the local jurisdiction's General Plans.

The CIP planning process is carried out in accordance with the following Executive Limitations.

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are alligned with the Board's capital priorities."

The annual CIP process is the responsibility of the CIP Committee comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution
- Prioritization of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities
- Financial analysis, to determine the capacity of the District's capital funding sources to fund the proposed capital projects
- Outreach to local jurisdictions within Santa Clara County, to coordinate the District's Capital Improvement Program with their General Plans

- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities
- Board adoption of the CIP plan

The annual CIP planning process starts with collecting information on proposed new capital projects in July, followed by preliminary scoping, priority and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, together with other long-term planning efforts of the District, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP is being reviewed by the cities and County the budget is being reviewed and finalized. The Board concludes the outreach on the CIP with a public hearing. The first year of the CIP is reconciled with the budget and the two documents are presented to the board for formal adoption in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the Capital Improvement Program. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board on three separate occasions for review and input. Early in the process the project list is presented to the board so they can provide direction to staff, ensuring that the document is developed in accordance with board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. The CIP is adopted by the Board in May following a public hearing.

The CIP Board Committee met in May, July, September, October, and December of 2016 and monthly in 2017 to review and discuss information related to the development of the CIP and provide input to staff. The Committee provided direction on issues ranging from resource utilization and funding requirements to the prioritization criteria that are applied to each capital project before it is added to the CIP. The Committee's recommendations were incorporated into the CIP document or implemented by staff.

On January 10, 2017 the FY 2018-22 project list and prioritization criteria were reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2018-22 CIP:

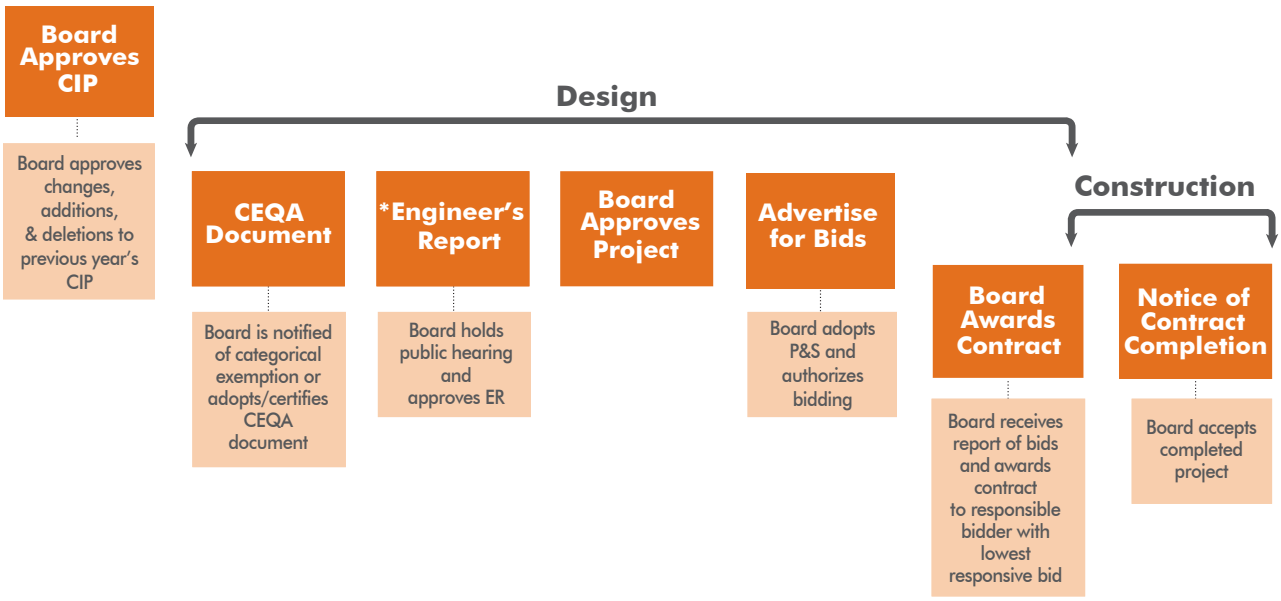
- To fully fund the Water Supply projects in the FY 2018-22 CIP, an increase in the groundwater production charges of up to 9.6% in North County and 6.4% for South County will be required in FY 2018.
- Three new projects with a combined cost of $7.8 million were added to the CIP. They are: Berryessa Creek, from Lower Penitencia Creek to Calaveras Boulevard--Phase 3, planning and design only; E-Discovery Management System; and Watershed Habitat Enhancements.
- The Expedited Purified Water Program has been separated into two projects. The first project would include expansion of the Silicon Valley Advanced Water Purification Center (SVAWPC) and the conveyance pipeline to the Los Gatos Recharge Ponds. The remaining elements of the Program address the District's long-term water supply portfolio beyond 2040.
  Resolution of several items in the Memorandum of Understanding being negotiated with the City of San Jose for the expansion of purified water production will require additional time. Staff estimates that an additional 1 to 2 years of collaborative effort may be needed. The Draft FY 2018-22 CIP reflects a two-year shift.
- As work proceeds on the Anderson Dam Seismic Retrofit Project the investigations have shown that more extensive embankment retrofit is necessary, this will add will add about $200M (2016 dollars) to the project cost.
- The timing of the IRP2 Line Valves Project has been moved forward, staff plans to design and install these line valves in conjunction with the 10-year Pipeline Rehabilitation Project
- The Watersheds Asset Rehabilitation Program (formerly the Erosion Repair Program), continues to be a priority. In addition to the approximately $15M of work completed or currently underway, the FY 2018-22 CIP includes $64M in funding for the program. More than 30 erosion sites along District-owned

portions of creeks throughout the county would benefit from repair. Staff continues to monitor and evaluate the priority of individual sites and refine the multi-year program. Approximately $60M to $100M of identified work remains unfunded.

- To increase the visibility of the District's efforts to improve fish passage in local streams, feasibility studies at Ogier Ponds, Metcalf Ponds and Stevens Creek are included in the Water Resources Stewardship section of the CIP.

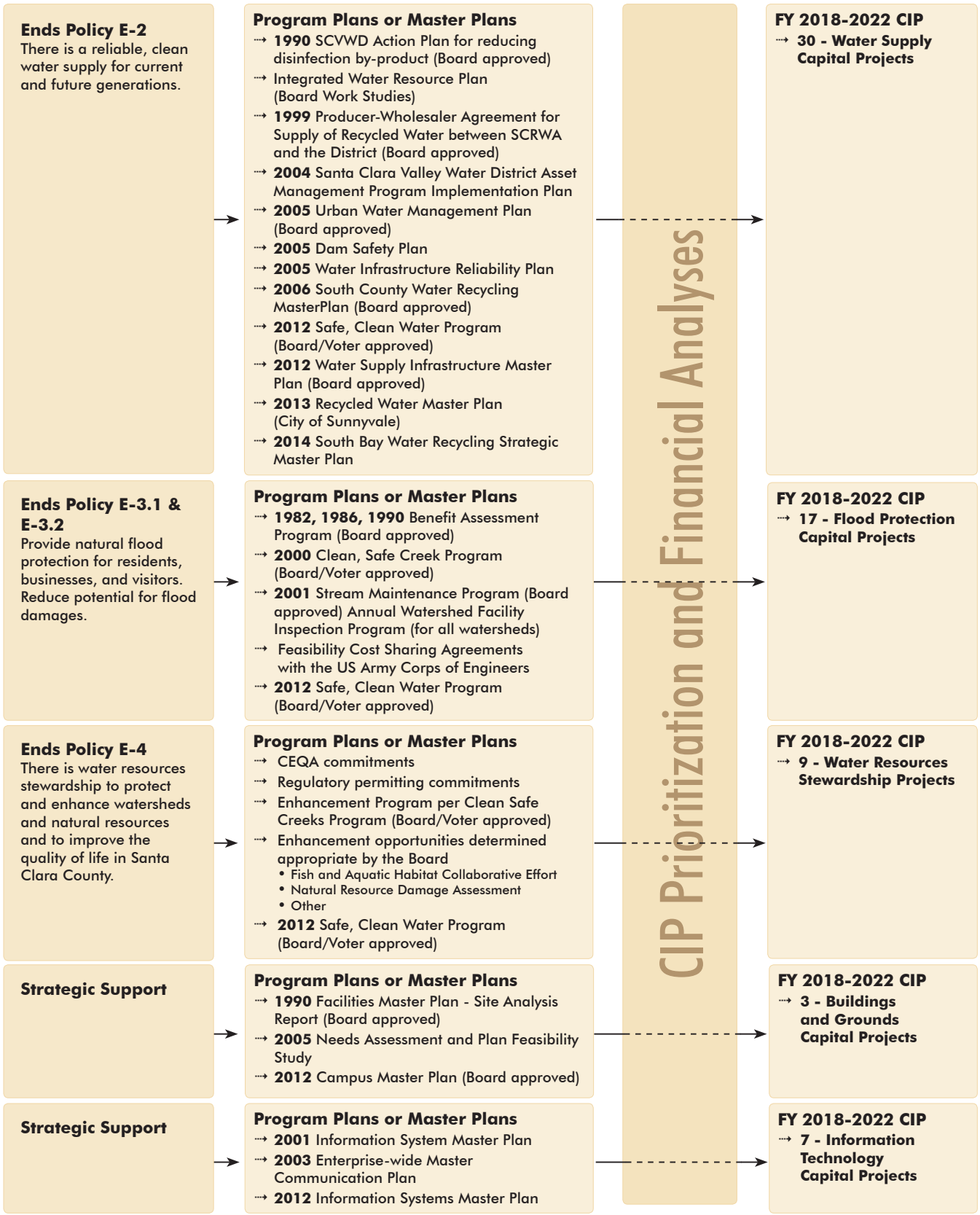
Each project in the CIP goes through a planning phase, design phase and construction phase. The Board may determine to not implement a project based on various considerations such as financial constraints, environmental impacts or community desire during a project's planning or design phases. Approval of a capital project by the Board occurs at the end of the design phase when the Board approves the plans and specifications to solicit bids for construction of the project.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



** Board approval of the Engineer's Report is required only on projects with zone funding.*

CIP PROCESS ALIGNMENT WITH ENDS POLICIES



FISCAL YEAR 2018-22 CIP SUMMARY

The recommended CIP for FY 2018-22 includes 66 priority projects to implement the goals and objectives of the District's program plans and master plans. These projects are grouped into five types of improvements.

- *Water Supply Capital Improvements*
  30 projects contributing to Ends Policy E-2
- *Flood Protection Capital Improvements*
  17 projects contributing to Ends Policy E-3
- *Water Resources Stewardship Capital Improvements*
  9 projects contributing to Ends Policy E-4
- *Buildings and Grounds Capital Improvements*
  3 projects supporting District efforts to achieve the Ends Policies
- *Information Technology Capital Improvements*
  7 projects supporting District efforts to achieve the Ends Policies

Each of the 66 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for the District are property taxes, a special parcel tax and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. The District continues to receive a small amount of revenue from benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

In November 2012 the voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water). This program replaced the Clean, Safe Creeks Program that would sunset in 2016. Safe, Clean Water has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water program will provide over $750 million of special parcel tax revenue for operations and capital projects.

The District aggressively pursues external funding to supplement its principal revenue when practical. In recent years District projects benefited from $43.4 million in American Recovery and Reinvestment Act (ARRA) funding. A number of District projects are receiving substantial State funding through grants from the Department of Water Resources (DWR) either directly or through local partner agencies. For a complete listing of grants and partnerships see Appendix C.

- $25 million for Lower Silver Creek from DWR
- $8 million for San Francisquito Creek through the Joint Powers Authority
- $30 million Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR
- $2.5 million for Wolfe Road Recycled Water Pipeline from DWR

DISTRICT PRIORITIES	District Funds				
Type of Improvement	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
Water Supply	●			●	
Flood Protection		●		●	
Water Resources Stewardship	●	●		●	
Buildings and Grounds			●		
Information Technology	●				●

This chart identifies which types of improvement are associated with each of the District's five capital funds.

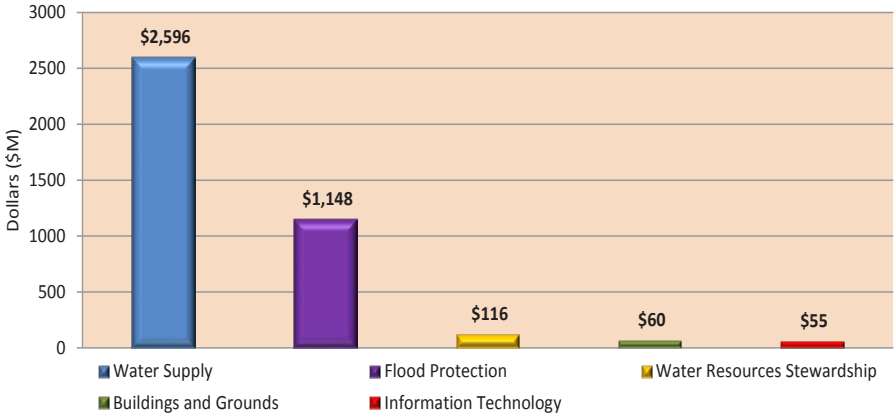
Overview

The estimated total funding required to implement the 66 projects defined in the CIP is $4.45 billion. The District has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the $4.45 billion total funding, $691 million is expected from the District's various partners, such as the U.S. Army Corps of Engineers (USACE), and $3.762 billion from the District. A list of projects that are funded cooperatively with the District's partners is summarized in Appendix C. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed (cost-sharing agreements or in-kind services), or
- Funds that are reimbursed by the partners after the District advances the needed funds.

Of the $691 million that is expected from the District's partners, $213 million is advanced by the District and reimbursed later. This $213 million is included in the CIP, and increases the District's total funding requirement from $3.762 billion to $3.975 billion, to ensure that the District has adequate funding to advance the reimbursement.

CIP Funding by Type of Improvement

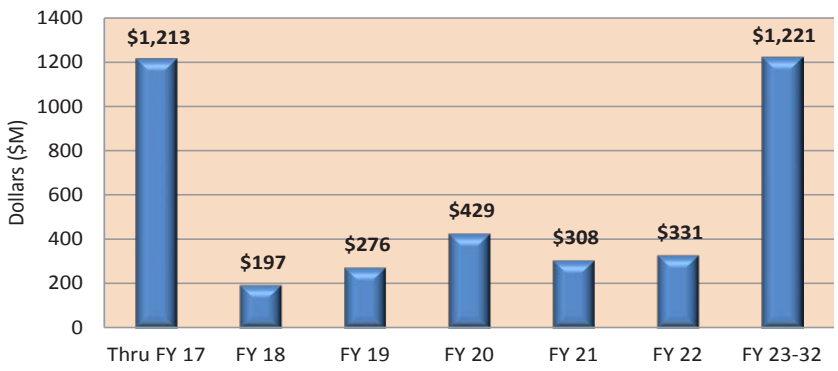


The chart above shows the distribution by type of improvement, of the $3.975 billion total CIP funding as planned in the FY 2018-22 CIP.

The chart above shows how the $3.975 billion to implement the 66 projects is allocated to each of the five Types of Improvements.

Of the $3.975 billion in total funding for the 66 projects identified in the CIP, the Board has appropriated $1.213 billion in prior years (through June 30, 2017 the end of Fiscal Year 2016-17). This year's CIP process identified additional funding needs of $2.762 billion to complete the projects in the CIP, with $197 million allocated in Fiscal Year 2017-18 and a total of $2.565 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.

CIP Funding Schedule



The chart above shows how the $3.975 billion is distributed by fiscal year.

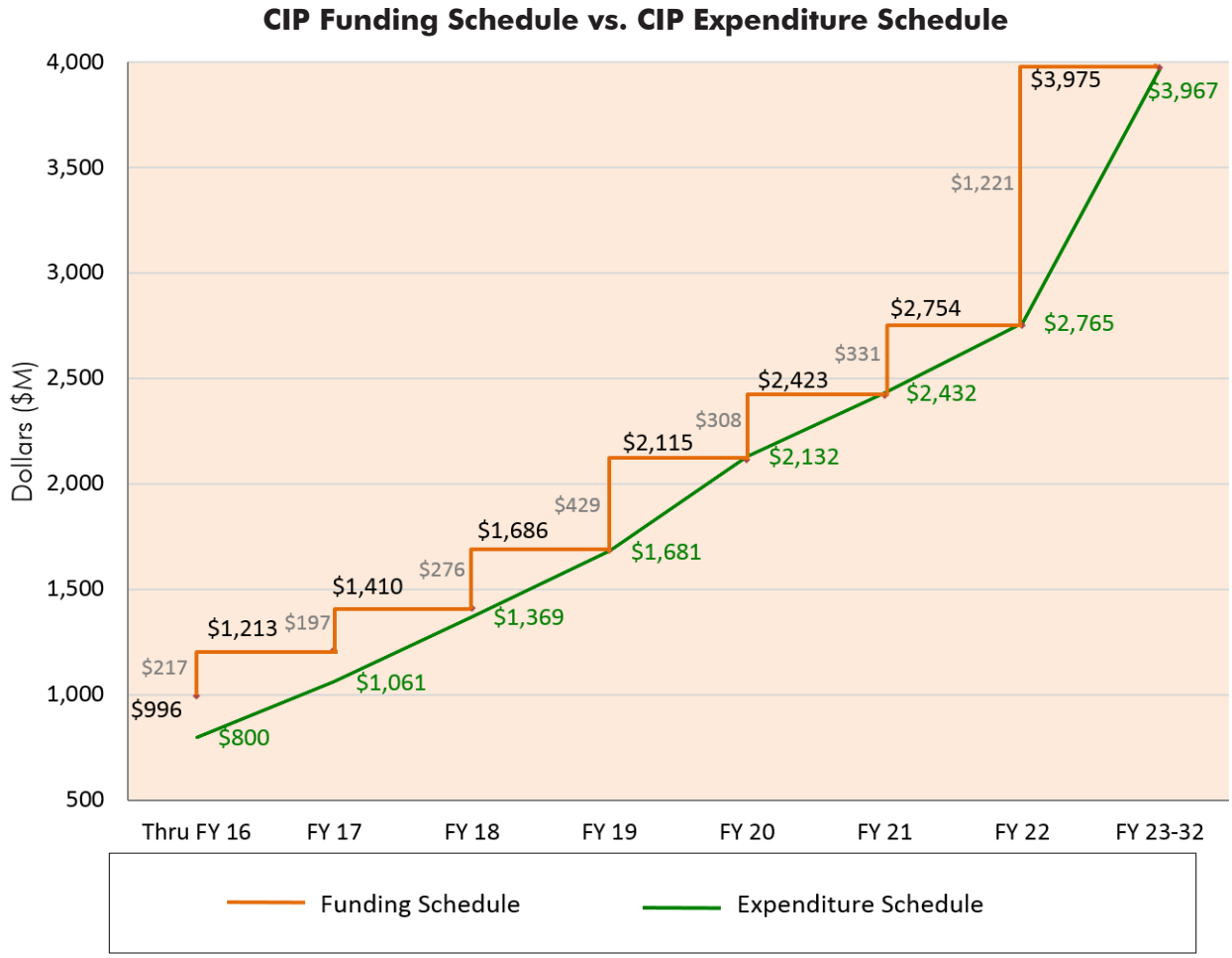
CIP Funding Schedule by Type of Improvement and Funding Sources ($K)

	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	306,113	119,578	39,035	104,586	120,593	319,255	226,872	279,351	1,089,813	2,566,161
Safe, Clean Water and Natural Flood Protection Fund	1,807	981	-	14,617	302	1,046	1,314	9,244	192	29,503
Water Supply Total	307,920	120,559	39,035	119,203	120,895	320,301	228,186	288,595	1,090,005	2,595,664
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	257,649	38,561	17,455	22,820	54,577	13,460	16,770	18,358	21,072	443,267
Safe, Clean Water and Natural Flood Protection Fund	394,998	45,025	90,935	36,865	69,940	66,994	41,918	14,309	35,103	705,152
Flood Protection Total	652,647	83,586	108,390	59,685	124,517	80,454	58,688	32,667	56,175	1,148,419
WATER RESOURCES STEWARDSHIP										
Water Utility Enterprise Fund	765	-	-	-	2,134	3,597	775	802	7,886	15,959
Watershed Stream Stewardship Fund	18,317	2,315	1	2,430	3,838	2,745	775	802	7,886	39,108
Safe, Clean Water and Natural Flood Protection Fund	5,124	3,729	1,092	2,195	16,758	15,033	9,510	802	7,886	61,037
Mitigation Total	24,206	6,044	1,093	4,625	22,730	21,375	11,060	2,405	23,658	116,103
BUILDINGS AND GROUNDS										
General Fund	2,902	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	60,050
Buildings and Grounds Total	2,902	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	60,050
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	740	180	20	1,301	555	198	-	103	9,777	12,854
General Fund	1,199	-	-	-	-	-	-	-	-	1,199
Information Technology Fund	6,585	4,147	3,025	10,073	4,117	846	965	438	13,591	40,762
Information Technology Total	8,524	4,327	3,045	11,374	4,672	1,044	965	541	23,368	54,815
TOTAL	996,199	216,903	152,714	196,577	275,942	429,191	308,108	331,399	1,220,732	3,975,051
CUMULATIVE TOTAL	996,199	1,213,102		1,409,679	1,685,621	2,114,812	2,422,920	2,754,319	3,975,051	

FY 2016-17 Funds to be reappropriated

Overview

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately $153 million of the already appropriated $1.213 billion is not spent and is reappropriated to Fiscal Year 2017-18 for continued use in those same projects in amounts consistent with the project expenditure schedule for Fiscal Year 2017-18. The following chart explains the relationship between the CIP Funding Schedule and Expenditure Schedule.



This page intentionally left blank.

Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

The District manages and operates a complex and integrated water supply infrastructure, including storage, transmission, treatment, and recycled water facilities, to meet the Board's Ends Policy E–2, "There is a reliable, clean water supply for current and future generations."

Storage Facilities

- 10 surface reservoirs
- 393 acres of recharge ponds
- 76 miles of in-stream recharge
- Ground water basins

Transmission Facilities

- 142 miles of pipelines
- 3 pump stations

Treatment Facilities

- 3 treatment plants

Recycled Water Facilities

- Silicon Valley Advanced Water Purification Center
- South County Recycled Water Distribution System

Planning, design and construction of the above facilities took decades of effort. Beginning in the 1930s, reservoirs and recharge ponds were built to halt depletion of the ground water basin and subsidence, followed by pipelines and treatment plants to bring in state and federal water to meet growing water demands in the County.

In the early 1990s, the District embarked on new and challenging capital improvements to upgrade its three drinking water treatment plants in order to meet new Environmental Protection Agency rules for improved water quality required by 1996 amendments to the Safe Drinking Water Act. Fifteen years of effort and capital funding brought the upgrades at Penitencia and Santa Teresa Water Treatment Plants to completion. Delivery of ozonated water produced at these two treatment plants began in 2006.

The Rinconada Water Treatment Plant (RWTP) was built in the late 1960s and is reaching the end of its useful life. Projects to replace and update the treated water valves and residuals management process, and to seismically retrofit the Operations Building are nearing completion. The RWTP Reliability Improvement Project will add raw water ozonation, construct new flocculation and plate settler clarification, and dual media filtration facilities. It will also increase plant capacity from 80 to 100 million gallons per day. Construction of this Project began in the summer 2015 and will continue for approximately 5 years. It will be constructed in a phased approach that will allow the plant to continue operations throughout the construction process.

With a significant portion of the Water Supply infrastructure approaching fifity to sixty years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply Capital Improvement Program in recent years, as shown in the CIP.

The District owns and operates ten dams. While these dams provide water supply, flood management, recreation, and environmental flow benefits, there are consequences and costs for dam ownership. Knowledge of seismic stability design and construction was very rudimentary during the design and construction of District dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability is critical for seismic stability. Several of the District reservoirs have operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how the District's dams would perform under a major seismic event is completed and appropriate corrective actions are implemented.

On November 26, 2010 the Board was informed that Anderson Dam will require a seismic retrofit and the operating restriction was increased to 45 feet below the crest of the dam. Since this briefing, the consultant

has determind that a magnitude 7.2 Maximum Credible Earthquake on nearby Calaveras Fault could cause a deformation (slumping) of the dam crest by 25 feet. The Anderson Dam Seismic Retrofit Project ($445 million) was initiated in January 2011.

The District completed a seismic stability evaluation of Almaden, Calero, and Guadalupe Dams in late 2010. Almaden Dam was found to be seismically stable; however both Calero and Guadalupe Dams will require seismic retrofitting to meet DSOD performance criteria. A project was initiated in fiscal year 2013 to address the Calero and Guadalupe Dams retrofit needs. A separate capital project to address outlet and spillway improvements at Almaden Dam is continuing. Seismic stability evaluations were conducted at Lenihan and Stevens Creek Dams. Both were found to be seismically stable.

Major Capital Improvements Identified in CIP

Storage:

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Calero Dam Seismic Retrofit
- Guadalupe Dam Seismic Retrofit

Transmission:

- 10-Year Pipeline Rehabilitation
- FAHCE Implementation
- Main and Madrone Pipeline Rehabilitation
- Penitencia Delivery Main/Force Main Seismic Retrofit
- Vasona Pumping Plant Upgrades

Treatment:

- IRP2 WTP Operations Buildings Seismic Retrofit
- PWTP Residuals Management
- RWTP Reliability Improvement

Recycled Water:

- Expedited Purified Water Program
- South County Recycled Water Pipeline

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new water supply projects proposed to be added to the Fiscal Year 2018-22 CIP reflect the Board's priorities. The priority criteria used to evaluate these projects is included in Appendix A.

A financial analysis of the Water Utility Enterprise Fund, the funding source for water supply capital improvements, was performed to determine the limitations to funding the projects proposed for the Fiscal Year 2018-22 capital program. Results of this year's prioritization process and financial analysis are summarized in Appendix B.

Based on the feedback from the FY 2006-07 CIP and Board direction, a concerted effort was made to develop a multi-year water charge structure that would support the priority work of the water utility business. Staff analyzed both immediate requirements and anticipated future needs to support operations and the continued appropriations for capital investment needed to maintain infrastructure and comply with water quality regulations. Each year staff reviews Board priorities, the financial needs of the water utility enterprise fund, current political and economic factors and updates the multi-year structure. The rate structure for the first year is recommended to the Board for adoption during the annual rate setting process.

While the District has one Water Utility fund, the District has two zones of benefit for the purposes of setting groundwater production charges. The North County Zone is very different from the South County Zone in that the water infrastructure is substantially separate and distinct with an entirely different cost of providing service. For example the north zone overlays the Santa Clara groundwater subbasin and is much more densely populated requiring a large amount of imported water from outside the county to provide a reliable water supply. To receive, filter and distribute

Water Supply Capital Improvements

the imported water, the District chose to build 3 water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. The south zone on the other hand overlays the Coyote and Llagas groundwater subbasins and is more sparsely populated. South County relies primarily on groundwater to serve roughly 50% agricultural and 50% non-agricultural water needs. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County. A small amount of imported water is used to recharge the groundwater subbasins in the South County. The groundwater subbasins have the ability to absorb the recharge and remain healthy under normal water usage levels unlike the North County where several sections of the groundwater basin are very sensitive, which is the main reason for building the treatment plant system long ago.

To fully fund the Water Supply projects in the FY 2018-22 CIP an increase in the groundwater production charges up to 9.6% in Zone W-2 (North County) and 6.4% in Zone W-5 (South County) will be required in FY 2017-18. Preliminary projections indicate the need for annual rate increases of 10.9% on average in subsequent years for North County and 5.7% on average for South County.

The majority of capital projects included in the 5-Year CIP are related to asset management which replaces aging equipment and facilities, infrastructure reliability, which protects the county's baseline water supply or Advanced Purified Water which produces a drought proof source of water.

The District is currently engaged in several critical studies related to understanding the conditions of various water supply facilities and meeting future water supply needs of the county including updating the Water Supply Master Plan, which is scheduled to be presented to the Board in December 2017. These studies will likely identify a number of new capital projects, some of which may require significant capital investment.



Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2016-17.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
	STORAGE FACILITY										
91854001	Almaden Dam Improvements	10,038	2,621	-	520	541	562	538	27,590	17,184	59,594
91864005	Anderson Dam Seismic Retrofit (C1)	30,836	750	-	7,913	3,203	147,292	83,915	107,297	63,341	444,547
91084020s	Calero and Guadalupe Dams Seismic Retrofits	17,533	9,267	2,901	3,349	26,942	67,955	27,036	7,533	-	159,615
91234002	Coyote Pumping Plant ASD Replacement	-	-	-	536	1,994	9,001	4,720	-	-	16,251
91234011	Coyote Warehouse	713	2,227	2,156	2,904	546	-	-	-	-	6,390
91084019	Dam Seismic Stability Evaluation	18,812	-	1,071	-	-	496	468	-	-	19,776
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	3,608	-	2,457	1,294	-	726	94	24,905	33,084
	TRANSMISSION FACILITY										
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	15,965	20,157	11,474	4,502	8,231	36,899	97,228
92C40357	FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
26C40349	IRP2 Additional Line Valves (A3)	-	-	-	-	-	1,046	1,314	9,244	192	11,796
26564001	Main & Madrone Pipelines Restoration (A1)	1,807	981	-	14,617	302	-	-	-	-	17,707
91214001	Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	3,625	97	-	-	-	-	-	7,031
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	719	505	251	2,389	317	-	-	-	4,818
94384002s	Penitencia Delivery Main/Force Main Seismic Retrofit	24,940	9,647	-	674	-	-	-	-	-	35,261
92374005	SCADA Remote Architecture & Communications Upgrade	402	374	292	186	188	180	936	852	3,909	7,027
92764009	Small Capital Improvements, Raw Water Transmission	n/a	-	-	321	75	51	-	94	3,213	3,754
94764006	Small Capital Improvements, Treated Water Transmission	n/a	-	-	-	144	-	-	-	-	144
92264001	Vasona Pumping Plant Upgrade	-	119	69	712	691	1,642	17,673	85	-	20,922
	TREATMENT FACILITY										
93084011	Fluoridation at WTPs	6,875	3,009	56	277	-	-	-	-	-	10,161
93764003	IRP2 WTP Ops Bldgs Seismic Retrofit	20,992	1,167	-	346	-	-	-	-	-	22,505
93234043	PWTP Clearwell Recoating & Repair	5,919	550	297	-	-	-	-	-	-	6,469
93234044	PWTP Residuals Management	-	-	-	-	703	1,462	7,835	-	-	10,000
93294051	RWTP FRP Residuals Management Modifications	26,096	5,403	-	17,054	2,760	403	-	-	-	51,716
93294057	RWTP Reliability Improvement	71,509	45,178	-	48,144	47,524	47,961	30,421	146	-	290,883
93294056	RWTP Treated Water Valves Upgrade	8,369	191	-	170	187	22	-	-	-	8,939
93764004	Small Capital Improvements, Water Treatment	n/a	3,216	-	2,512	6,444	7,565	7,875	3,950	17,154	48,716
	RECYCLED WATER FACILITY										
91304001s	Expedited Purified Water Program (EPWP)	18,482	9,669	8,891	-	-	15,422	25,309	108,789	461,299	638,970
91C40389	Long-Term Purified Water Program Elements	-	-	-	-	-	-	-	-	355,300	355,300
91094007s	South County Recycled Water Pipeline	27,784	15,772	19,030	-	72	3,071	227	-	-	46,926
91244001	Wolfe Road Recycled Water Pipeline	14,171	657	142	198	-	-	-	-	-	15,026
	TOTAL	307,920	120,559	39,035	119,203	120,895	320,301	228,186	288,595	1,090,005	2,595,664

FY 2016-17 Funds to be reappropriated

Water Supply Capital Improvements

The following table shows funding requirements from each funding source for water supply capital.

Water Supply - Funding Source ($K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	306,113	119,578	39,035	104,586	120,593	319,255	226,872	279,351	1,089,813	2,566,161
26	Safe, Clean Water and Natural Flood Protection Fund	1,807	981	-	14,617	302	1,046	1,314	9,244	192	29,503
	TOTAL	307,920	120,559	39,035	119,203	120,895	320,301	228,186	288,595	1,090,005	2,595,664

FY 2016-17 Funds to be reappropriated

This page intentionally left blank.

Project	**Almaden Dam Improvements**
Program	Water Supply – Storage
Priority No.	50
Project No.	91854001
District Contact	Katherine Oven koven@valleywater.org



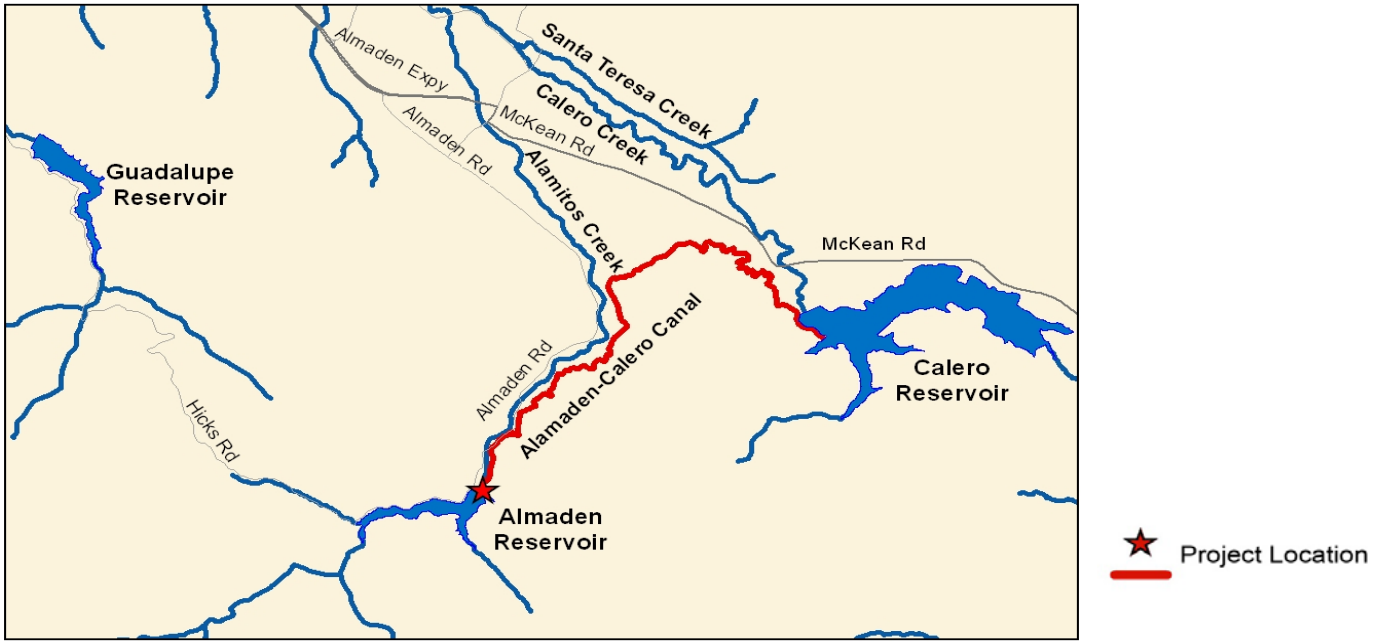
Aerial view of Almaden Dam and spillway, with a portion of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Almaden Dam Outlet Works to accomplish the following objectives:

- Modify or construct a new intake structure, capable of releasing 246 cubic feet-per-second (cfs) of water without flushing of sediments through the outlet works.
- Correct existing problems with the outlet energy dissipation structure, piping and valves.
- Restore operational capacity to the Almaden-Calero Canal and stabilize and improve maintenance access.

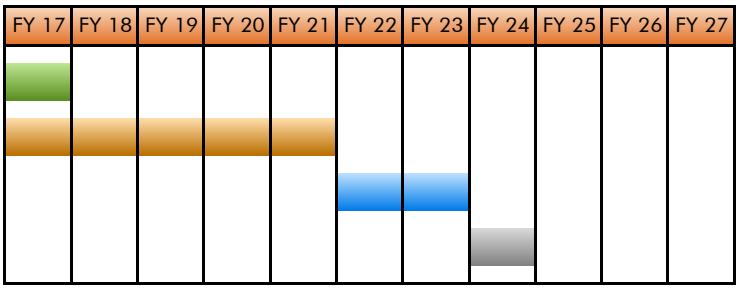
PROJECT LOCATION



SCHEDULE & STATUS

July 1995 to June 2024

Phase	Cost
Plan	4,957
Design	5,587
Construct	38,082
Closeout	302
	48,928



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91854001-Almaden Dam Improvements	10,177	2,482	520	500	500	460	21,710	16,672	53,021
with inflation	10,177	2,482	520	541	562	538	27,590	17,184	59,594

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91854001-Almaden Dam Improvements	10,038	2,621	0	520	541	562	538	27,590	17,184	59,594

Adjusted Budget includes adopted budget plus a planned budget adjustment for $139,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	59,594
Other Funding Source	0
Total	**59,594**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $2,000 per year, beginning in FY 2025. Manually flushing the control valves during the winter months to remove silt will no longer be required.

USEFUL LIFE: 50+ Years

Project	**Anderson Dam Seismic Retrofit**
Program	Water Supply – Storage
Priority No.	100
Project No.	91864005
District Contact	Katherine Oven koven@valleywater.org



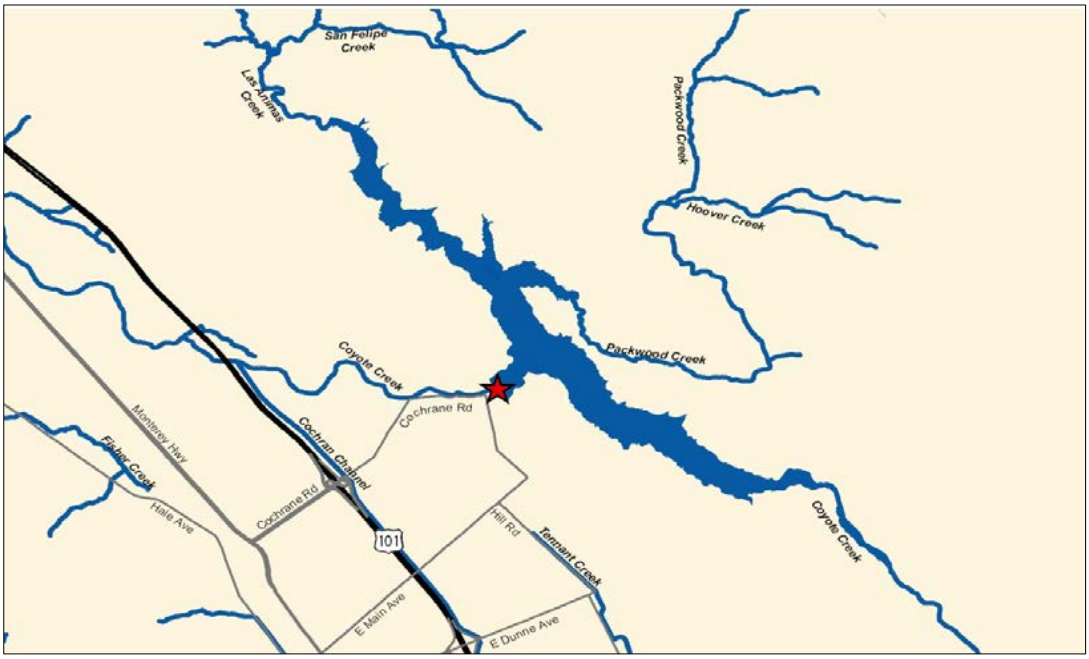
Aerial view of Anderson Dam and spillway, with a portion of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic retrofit or replacement of outlet works at Anderson Dam, pending completion of a field investigation that will determine whether the Coyote Fault is determined to be "active". Seismic stability improvements will accomplish the following objectives:

- Resolve seismic stability deficiencies to ensure public safety.
- Restore lost reservoir storage capacity resulting from the operational restriction issued by Division of Safety of Dams (DSOD).
- Resolve the DSOD/FERC (Federal Energy Regulatory Commission) requirements in a timely manner.

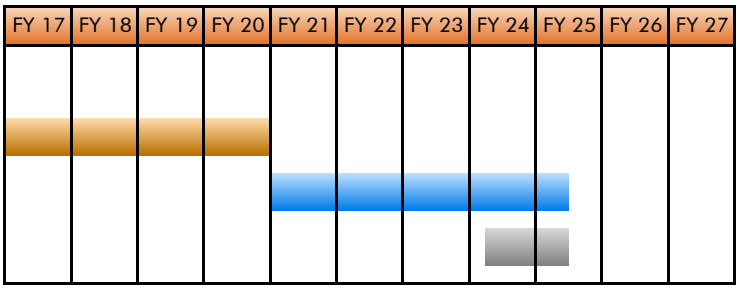
PROJECT LOCATION



SCHEDULE & STATUS

January 2011 to December 2024

Phase	Cost
Plan	13,973
Design	26,744
Construct	355,837
Closeout	1,100
	397,654



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91864005-Anderson Dam Seismic Retrofit	29,001	2,585	7,913	2,961	115,311	82,664	105,161	61,363	406,959
with inflation	29,001	2,585	7,913	3,203	147,292	83,915	107,297	63,342	444,547

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91864005-Anderson Dam Seismic Retrofit	30,836	750	0	7,913	3,203	147,292	83,915	107,297	63,342	444,547

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	378,494
SCVWD Safe Clean Water Fund	66,053
Other Funding Sources	0
Total	**444,547**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project Calero and Guadalupe Dams Seismic Retrofits
Program Water Supply - Storage
Priority No. 92
District Contact Katherine Oven koven@valleywater.org
Project No. 91084020s



Aerial view of the Calero Dam and reservoir



Areial view of the Guadalupe Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Calero and Guadalupe Dams to accomplish the following objectives:

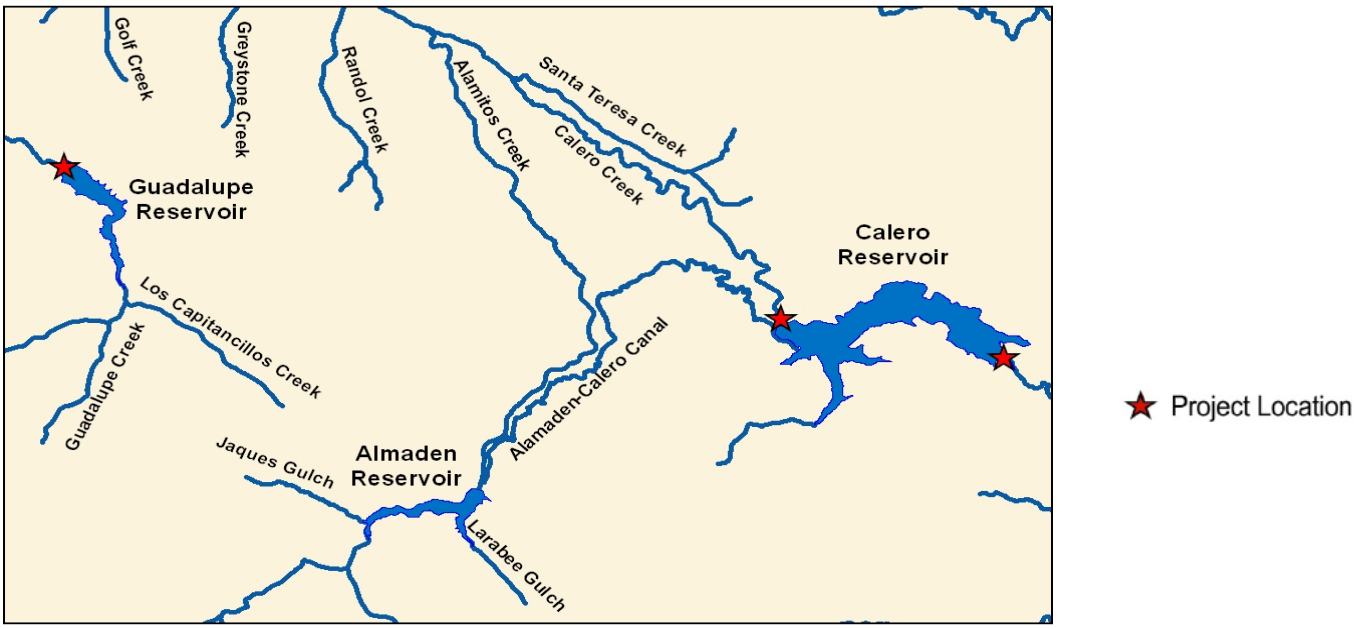
Calero Dam

- Stabilize the embankment to withstand a Maximum Credible Earthquake (MCE).
- Modify or replace the outlet works if determined to be inadequate.
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood (PMF).
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage.
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike.

Guadalupe Dam

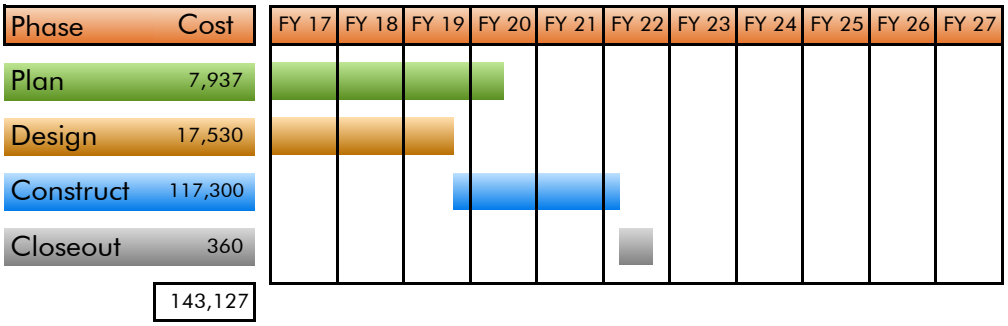
- Stabilize the embankment to withstand a MCE.
- Implement improvements as necessary for the Dam system to safely pass the PMF.
- Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams (DSOD) requirements.
- Relocate the intake structure out of the upstream berm in a timely manner
- Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process.

PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to March 2022



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	7,179	333	1,810	200	150	0	0	0	9,672
with inflation	7,179	333	1,810	216	169	0	0	0	9,707
91874004 - Calero Dam Seismic Retrofit-Design & Construct	3,814	4,477	3,120	13,550	46,000	5,750	1,438	0	78,149
with inflation	3,814	4,477	3,120	17,250	46,749	5,877	1,533	0	82,820
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	3,261	4,835	1,174	6,684	20,700	20,700	5,822	0	63,176
with inflation	3,261	4,835	1,174	9,622	21,037	21,159	6,000	0	67,088
TOTAL	**14,254**	**9,645**	**6,104**	**20,434**	**66,850**	**26,450**	**7,260**	**0**	**150,997**
with inflation	**14,254**	**9,645**	**6,104**	**27,088**	**67,955**	**27,036**	**7,534**	**0**	**159,615**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	9,468	0	1,956	0	70	169	0	0	0	9,707
91874004 - Calero Dam Seismic Retrofit-Design & Construct	4,630	4,593	932	2,188	17,250	46,749	5,877	1,533	0	82,820
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	3,435	4,674	13	1,161	9,622	21,037	21,159	6,000	0	67,088
TOTAL	**17,533**	**9,267**	**2,901**	**3,349**	**26,942**	**67,955**	**27,036**	**7,534**	**0**	**159,615**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	159,615
Other Funding Source	0
Total	**159,615**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Pumping Plant ASD Replacement**
Program	Water Supply – Storage
Priority No.	70
Project No.	91234002
District Contact	Christopher Hakes CHakes@valleywater.org



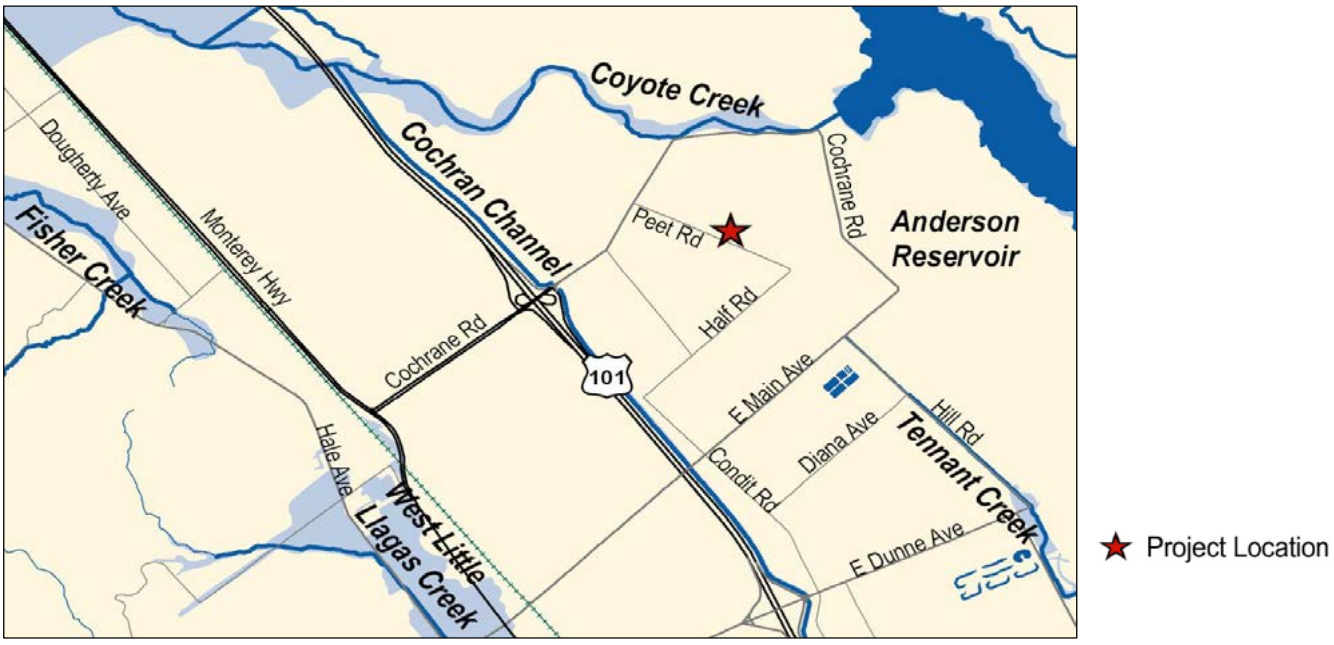
ASD Motors at the Coyote Pumping Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Coyote Pumping Plant Adjustable Speed Drives (ASD) to accomplish the following objectives:

- Replace existing outdated and unsupported ASDs with the latest technology.
- Modify/convert existing six wound rotor motors to be compatible with new stator fed ASD.
- Upgrade the HVAC system to support the additional cooling requirements.
- Modify/upgrade Supervisory Control and Data Acquisition (SCADA) control and instrumentation systems, and control strategy to support the new ASDs.
- Replace two main medium voltage circuit breaker and one medium voltage tie circuit breaker (switch) which are at the end of service life.
- Replace motor control equipment line-up (MCE) with new switchgears.
- Installation of a pump motor vibration and a power monitoring systems and motor control center.

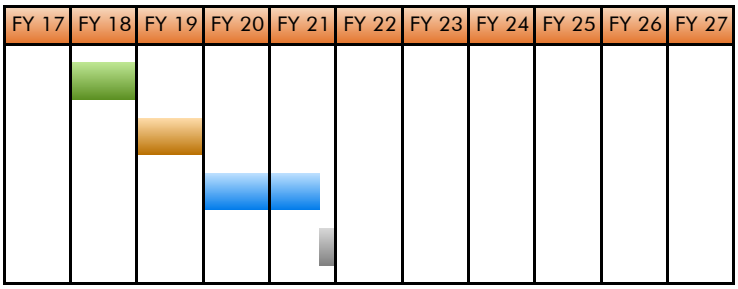
PROJECT LOCATION



SCHEDULE & STATUS

July 2017 to June 2021

Phase	Cost
Plan	730
Design	1,650
Construct	12,285
Closeout	65
	14,730



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91234002-Coyote Pumping Plant ASD Replacement	0	0	536	1,844	8,190	4,160	0	0	14,730
with inflation	0	0	536	1,994	9,001	4,720	0	0	16,252

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91234002-Coyote Pumping Plant ASD Replacement	0	0	0	536	1,994	9,001	4,720	0	0	16,252

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	12,567
San Benito County Water District	3,685
Total	**16,252**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $60,000 per year beginning in FY 2022.

USEFUL LIFE:

Not Avaliable

Project	**Coyote Warehouse**
Program	Water Supply - Storage
Priority No.	48
Project No.	91234011
District Contact	Katherine Oven koven@valleywater.org



Existing storage containers being used to secure equipment and spare parts

PROJECT DESCRIPTION

This project plans, designs, and constructs the Coyote Warehouse to accomplish the following objectives:

- Provide suitable storage space for pipeline spare parts and appurtenances to protect such materials from weather.
- Improve District's staff efficiency and effectiveness in pipeline maintance work.

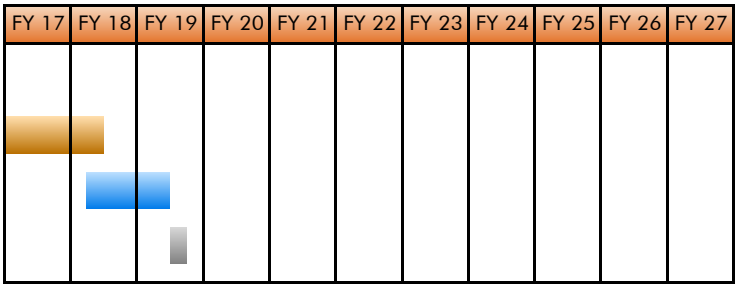
PROJECT LOCATION



SCHEDULE & STATUS

July 2014 to February 2019

Phase	Cost
Plan	33
Design	442
Construct	5,814
Closeout	60
	6,349



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91234011-Coyote Warehouse	525	259	5,060	505	0	0	0	0	6,349
with inflation	525	259	5,060	546	0	0	0	0	6,390

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91234011-Coyote Warehouse	713	2,227	2,156	2,904	546	0	0	0	0	6,390

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,390
Other Funding Sources	0
Total	**6,390**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the design phase.

USEFUL LIFE: 50 years

Project	**Dam Seismic Stability Evaluations**
Program	Water Supply – Storage
Priority No.	92
Project No.	91084019
District Contact	Katherine Oven KOven@valleywater.org



Field exploration for seismic stability evaluations

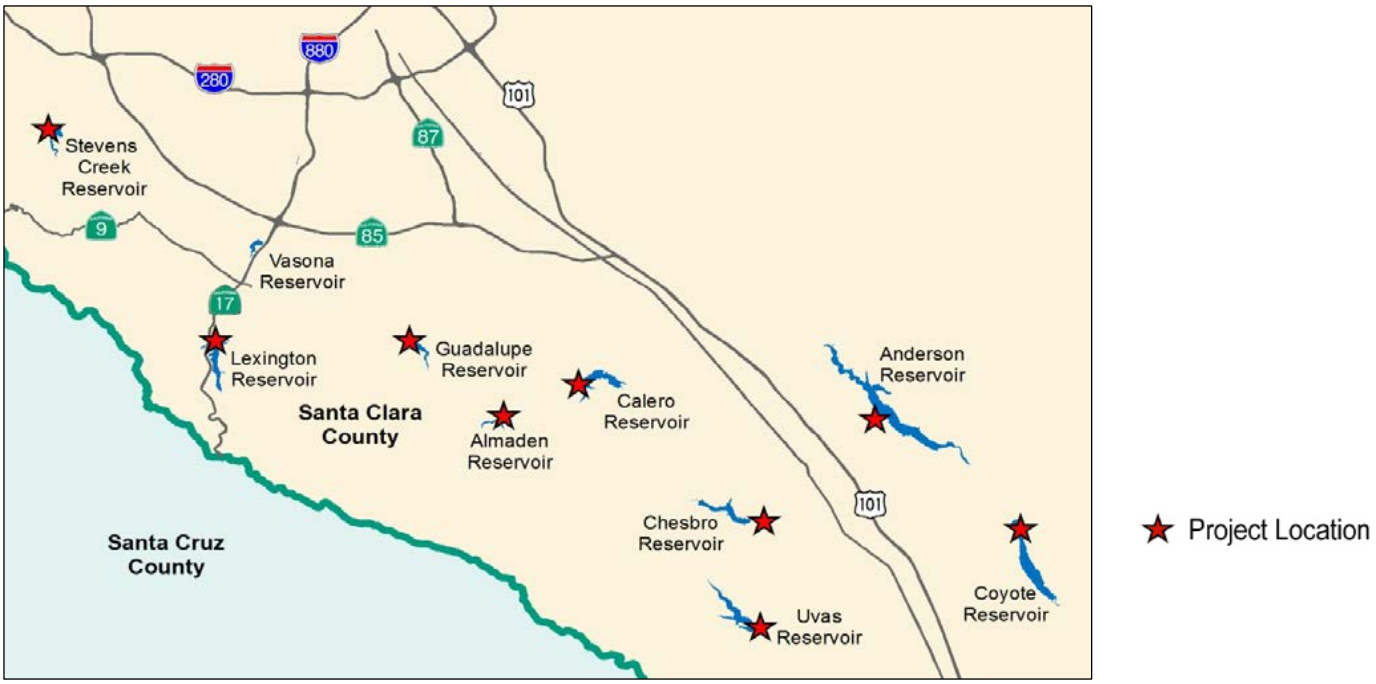
PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for 9 dams (shown on the map) to accomplish the following objectives:

- Address seismic stability issues.
- Provide for public safety.
- Ensure operational availability of reservoirs.
- Address protection of the assets.

Site specific planning, design, and construction of dam seismic stability improvements will be funded separately. This project funds preliminary planning (seismic stability evaluation, to determine the need for seismic stability improvements) for eight dams. The seismic stability evaluation for Anderson Dam was completed in a separate project. The seismic analysis for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams has been completed. The analysis for Coyote, Chesbro and Uvas is continuing through 2020.

PROJECT LOCATION

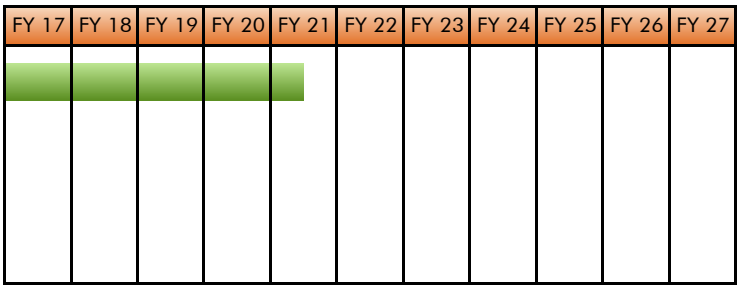


SCHEDULE & STATUS

August 2009 to December 2020

(Planning Phase Only)
Dam Safety Evaluation Report will take 5 years to complete, starting in 2015

Phase	Cost
Plan	13,555
Design	-
Construct	-
Closeout	-
	13,555



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91084019-Dam Seismic Stability Evaluations	17,042	699	520	500	450	400	0	0	19,611
with inflation	17,042	699	520	541	506	468	0	0	19,776

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91084019-Dam Seismic Stability Evaluations	18,812	0	1,071	0	0	496	468	0	0	19,776

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	19,776
Other Funding Source	0
Total	**19,776**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Small Capital Improvements, San Felipe**
Program	Water Supply – Storage
Priority No.	76
Project No.	91214010s
District Contact	Kurt Arends karends@valleywater.org



Suction wear ring bacterial corrosion of Impeller. Similar rehabilitation projects will be done in this project.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project implements a systematic approach to equipment replacement and renewal at facilities contained within San Felipe Division by designing and constructing improvements identified through the District's 10-year asset management program. Infrastructure within this project includes tunnels, large diameter pipelines and valve structures, pumps and associated equipment, as well as a large above ground storage tank. The Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors, partner cities, and other agencies. Planned projects for FY 2018 include:

- 91214010–Reach 1: Refurbish or Rebuild the pump, motor windings and bearings for Pump Units 5 & 7.
- 91224010–Reach 2: CFI/CFO Road Access Fix; Environmental clearance/permitting.
- 91234010–Reach 3: Nothing scheduled for FY 2018.

All active projects have positive NPV saving at feasibility study phase subject to design phase validation.

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	24,737

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,497	2,409	841	0	0	77	5,200	10,024
with inflation	n/a	1,497	2,409	910	0	0	94	7,645	12,554
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	1,145	48	0	0	0	0	0	1,193
with inflation	n/a	1,145	48	0	0	0	0	0	1,193
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	966	0	355	0	621	0	11,578	13,520
with inflation	n/a	966	0	384	0	726	0	17,260	19,337
TOTAL	**0**	**3,608**	**2,457**	**1,196**	**0**	**621**	**77**	**16,778**	**24,737**
with inflation	**0**	**3,608**	**2,457**	**1,294**	**0**	**726**	**94**	**24,905**	**33,084**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,497	0	2,409	910	0	0	94	7,645	12,554
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	1,145	0	48	0	0	0	0	0	1,193
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	966	0	0	384	0	726	0	17,260	19,337
TOTAL	**0**	**3,608**	**0**	**2,457**	**1,294**	**0**	**726**	**94**	**24,905**	**33,084**

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	29,686
San Benito County Water District	3,398
Total	**33,084**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**10-Year Pipeline Inspection & Rehabilitation**
Program	Water Supply – Transmission
Priority No.	78
Project No.	95084002
District Contact	Christopher Hakes CHakes@valleywater.org



A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

This project involves the inspection, planning, design, and renewal of the District's pipelines and tunnels to accomplish the following objectives:

- Perform dewatering and internal inspections of District's pipelines and tunnels.
- Renew distressed pipe sections as required. Renewal encompasses the actions of repair, rehabilitation, and replacement.
- Perform maintenance and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as appropriate.
- Modify failure prone pipeline appurtenance connections.

The first 5 years will include inspection and renewal work along the various pipelines and tunnels as identified below:

- 2018: Almaden Valley Pipeline
- 2019: Cross Valley Pipeline and Calero Pipeline
- 2020: Central Pipeline
- 2021: Santa Clara Conduit
- 2022: Pacheco Tunnel Reach 2, Santa Clara Tunnel, South Bay Aqueduct Retrofit Inspection

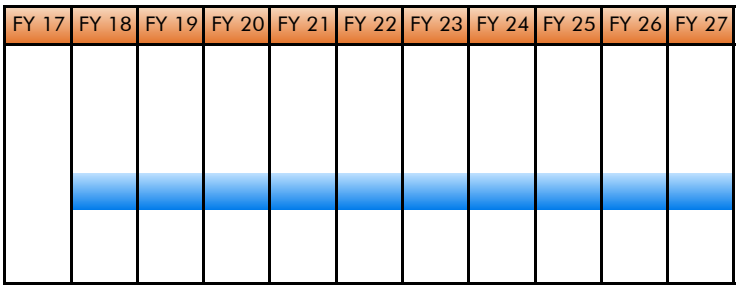
PROJECT LOCATION



SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	-
Design	-
Construct	85,300
Closeout	-
	85,300



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	15,500	19,000	10,500	4,000	7,100	29,200	85,300
with inflation	0	0	15,965	20,157	11,474	4,502	8,231	36,900	97,228

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	0	15,965	20,157	11,474	4,502	8,231	36,900	97,228

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	97,228
Other Funding Sources	0
Total	**97,228**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE:

Not Available

Project	**FAHCE Implementation**
Program	Water Supply - Transmission
Priority No.	73
Project No.	92C40357
District Contact	Vincent Gin VGin@valleywater.org



Fish habitats such as this will be developed for Habitat Conservation. Actual locations will differ.

PROJECT DESCRIPTION

This project funds habitat improvement projects to be implemented as part of the Three Creeks Fish Habitat Restoration Plan (FHRP), associated water rights orders and associated federal and state permits. The Three Creeks FHRP grew out of the 1996 Water Rights Complaint and subsequent Fish and Aquatic Habitat Collaborative Effort (FAHCE). The capital project components of the restoration measures are likely to include projects such as: upgrades for operational adaptibility and flexibility; instream channel enhancements; new fish screens, and instream barrier removals. When implemented, the Three Creeks FHRP currently under development will contain conservation measures designed to provide:

- Instream flows and fish passage to support salmonid spawning, rearing and migration.
- Other aquatic habitat improvement, e.g., gravel augmentation for instream complexity to support salmonid spawning and rearing
- Monitoring and adaptive management

PROJECT LOCATION

Project sites will be located at reservoirs and streams within the Three Creeks Project Area, in the Guadalupe, Coyote and Stevens Creek Watersheds. Project site locations are yet to be determined and no map is provided.

SCHEDULE & STATUS

July 2018 to June 2024

Phase	Cost
Plan	145,108
Design	-
Construct	-
Closeout	-
	145,108

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92C40357-FAHCE Implementation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108
with inflation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92C40357-FAHCE Implementation	0	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	145,108
Other Funding Source	0
Total	**145,108**

OPERATING COST IMPACTS

Operating cost impacts will vary, depending on the requirements for maintenance of each site. Once the sites have been identified, operating costs will be determined based on the existing conditions and maintenance identified for each site.

USEFUL LIFE: Not Available

Project	**IRP2 Additional Line Valves**
Program	Water Supply – Transmission
Priority No.	63
Project No.	26C40349
District Contact	Christopher Hakes CHakes@valleywater.org



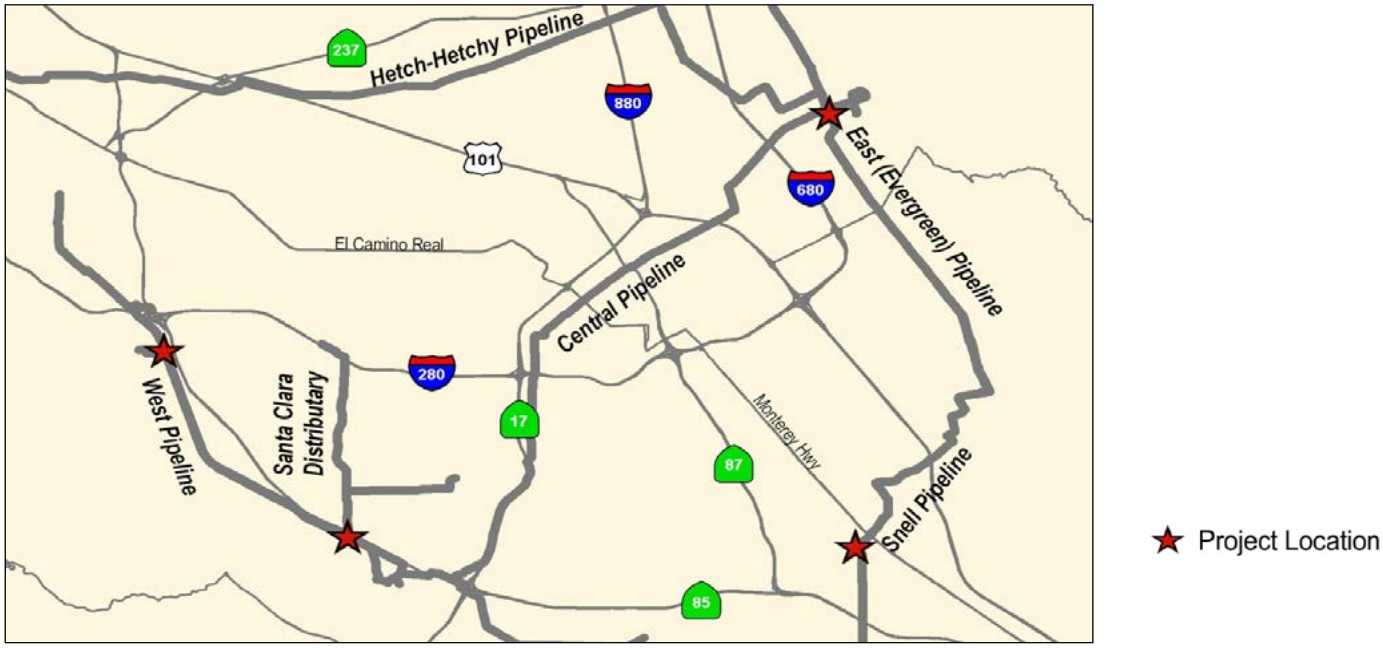
New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

PROJECT DESCRIPTION

This project plans, designs, and constructs four additional line valves in the treated water distribution system, as defined in the Water Infrastructure Reliability Plan, Phase 2 (IRP2). Design and Construction of this project will be in conjunction with work on the same pipelines under the 10- year Pipeline Inspection and Rehabilitation Project. The new line valves will be at various locations along the East, West, and Snell pipeline to accomplish the following objectives:

- Allow the district to isolate sections of the treated water pipeline to prevent water from bleeding out damaged sections following a major seismic event.
- Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

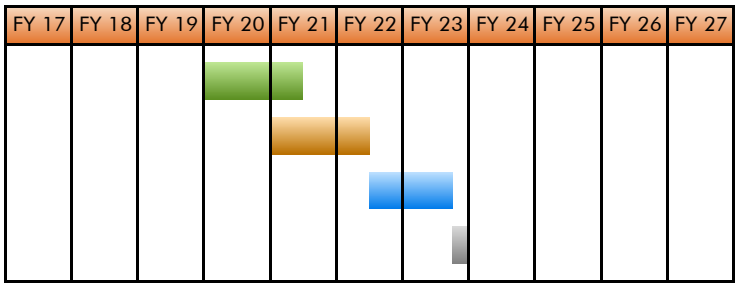
PROJECT LOCATION



SCHEDULE & STATUS

July 2019 to June 2023

Phase	Cost
Plan	930
Design	1,123
Construct	7,898
Closeout	152
	10,103



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26C40349-IRP2 Additional Line Valves	0	0	0	0	930	1,123	7,898	152	10,103
with inflation	0	0	0	0	1,046	1,314	9,244	192	11,796

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26C40349-IRP2 Additional Line Valves	0	0	0	0	0	1,046	1,314	9,244	192	11,796

FUNDING SOURCES

(in thousands $)

SCVWD Safe Clean Water Fund	11,796
Other Funding Source	0
Total	**11,796**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 35 Years

Project Main & Madrone Pipelines Restoration
Program Water Supply - Transmission
District Contact Christopher Hakes CHakes@valleywater.org
Priority No. 70
Project No. 26564001



Main Avenue Ponds facing North



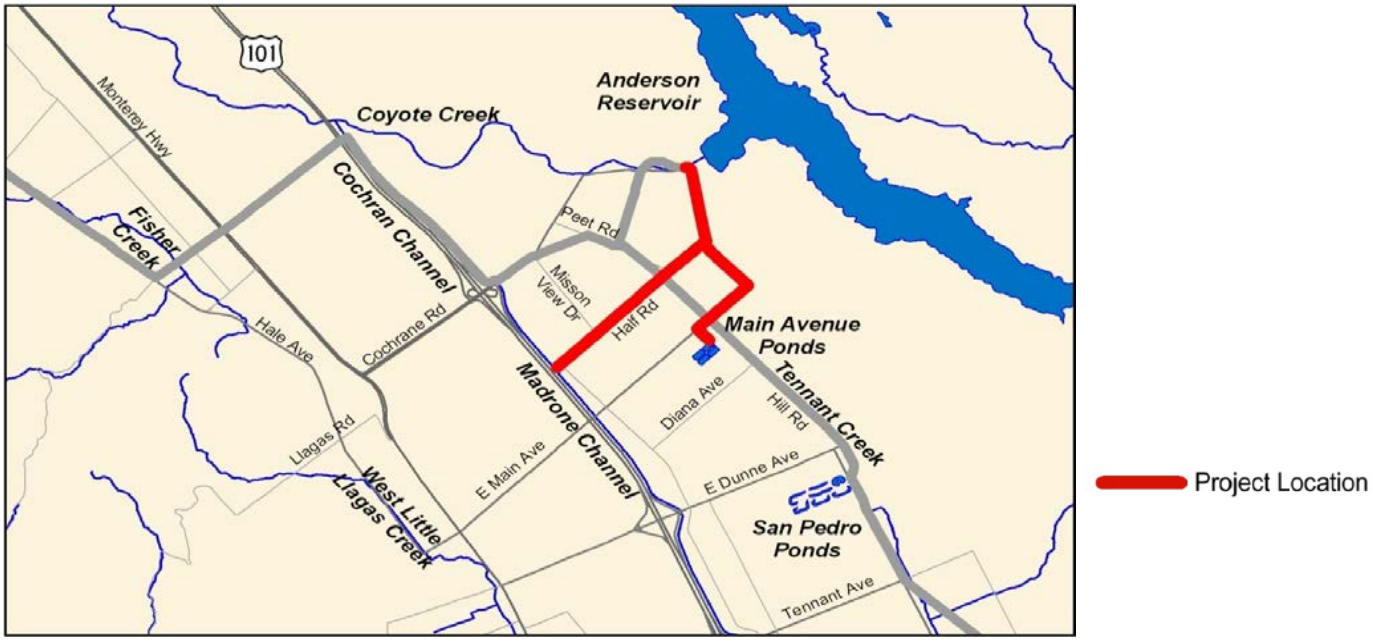
Madrone Pipeline Outlet into Madrone Channel looking North along Northbound Interstate 101

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on the full length of the Madrone Pipeline and rehabilitates the Main Avenue Pipeline to accomplish the following objectives:

- Provide the means to utilize another reliable water source, (e.g. Anderson Reservoir) to supply water to the Main Avenue Ponds and the Madrone Channel.
- Allow for greater flows to the Main Avenue Ponds and the Madrone Channel.
- Maximize imported water flows to the treatment plants.

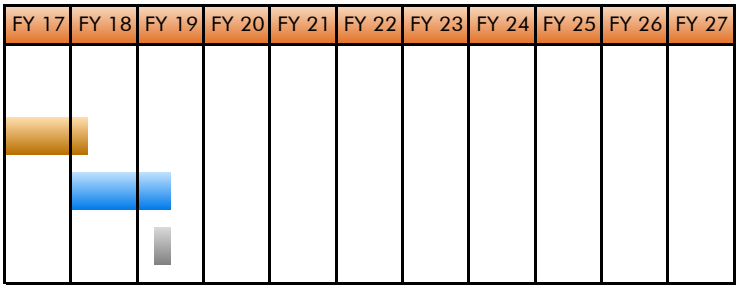
PROJECT LOCATION



SCHEDULE & STATUS

July 2014 to December 2018

Phase	Cost
Plan	343
Design	2,646
Construct	25,944
Closeout	90
	29,023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26564001-Main & Madrone Pipelines Restoration	1,179	1,609	14,617	279	0	0	0	0	17,684
with inflation	1,179	1,609	14,617	302	0	0	0	0	17,707

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26564001-Main & Madrone Pipelines Restoration	1,807	981	0	14,617	302	0	0	0	0	17,707

Adjusted Budget includes adopted budget plus a planned budget adjustment of $461,000.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	6,323
SCVWD Water Utility Enterprise Fund	11,383
Total	**17,707**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as it does not significantly alter the facility or modes of operation.

USEFUL LIFE: 40 Years

Project	**Pacheco Conduit Inspection & Rehabilitation**
Program	Water Supply – Transmission
Priority No.	75
Project No.	91214001
District Contact	Christopher Hakes CHakes@valleywater.org



A typical line valve assembly to be rehabilitated

PROJECT DESCRIPTION

This project plans, designs, and constructs major repairs and improvements to the District's pipelines and tunnels to accomplish the following objectives:

- Perform internal inspections, maintenance, and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as approprate.
- Upgrade pipeline air valve venting in accordance with CA Department of Public Health (CDPH) guidelines.
- Modify failure prone pipeline appurtenance connections.

The project also funds the development of the Pipeline Maintenance Program document for Fiscal Years 2018 to 2027 and CEQA/NEPA documenation and permit acquisitions.

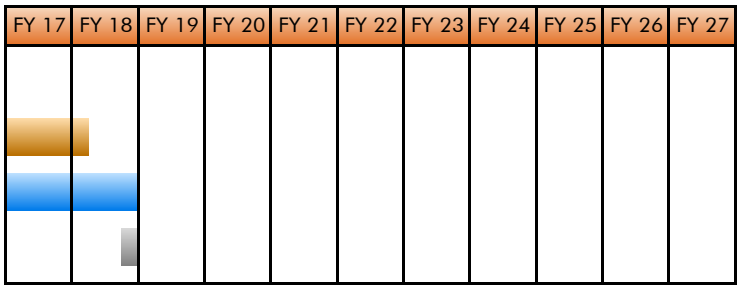
PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to September 2018

Phase	Cost
Plan	427
Design	3,512
Construct	27,100
Closeout	89
	31,128



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91214001-Pacheco Conduit Inspection and Rehabilitation	677	2,633	3,721	0	0	0	0	0	7,031
with inflation	677	2,633	3,721	0	0	0	0	0	7,031

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91214001-Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	3,625	97	0	0	0	0	0	7,031

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	5,496
San Benito County Water District	1,535
Total	**7,031**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Pacheco/Santa Clara Conduit Right of Way Acquisition**
Program	Water Supply – Transmission
Priority No.	75
Project No.	92144001
District Contact	Christopher Hakes CHakes@valleywater.org



Access to much of the San Felipe Division pipelines must currently be made through private property, due to a lack of easements, such as Bloomfield access at Vault 21-23.

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements related to the acquisition of right-of-way along the South County Pipeline to accomplish the following objectives:

- Provide unlimited access to District owned pipeline.
- Reduce conflicts with local land owners and improve response time for emergency repairs or operations.

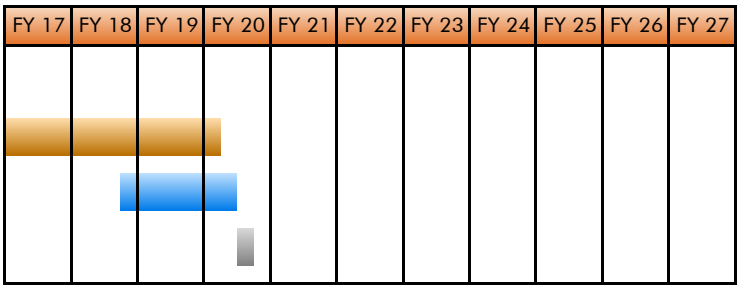
PROJECT LOCATION



SCHEDULE & STATUS

July 2009 to February 2020

Phase	Cost
Plan	729
Design	3,400
Construct	399
Closeout	35
	4,563



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,129	227	756	2,209	283	0	0	0	4,604
with inflation	1,129	227	756	2,389	317	0	0	0	4,818

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	719	505	251	2,389	317	0	0	0	4,818

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	4,793
San Benito County Water District	25
Total	**4,818**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $8,000 per year, beginning in FY 2020, for vegetation control and/or maintenance of fences, gates and locks for the access roads.

USEFUL LIFE: 15-20 Years

Project	**Penitencia Delivery Main/Force Main Seismic Retrofit**
Program	Water Supply – Transmission
Priority No.	83
Project No.	94384002s
District Contact	Christopher Hakes CHakes@valleywater.org



View of the Delivery Main for the Penitencia Water Treatment Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic improvements to the delivery main and force main junctions to prevent catastrophic failure due to an earthquake by accomplishing the following objectives:

- Perform a structural survey of the Penitencia Vault and Penitencia Delivery Main (PDM) Effluent Vault to ascertain the existing condition, their life expectancy, and whether any changes are necessary to accommodate the seismic retrofit project.
- Perform a seismic retrofit to the PDM, Penitencia Force Main (PFM), South Bay Aqueduct (SBA), and the Finished Water Meter Vault to accommodate both the creeping and potentially extensive seismically-induced movements of the active landslide over a 50-year design life. The Penitencia Valut is no longer necessary and will be demolished.

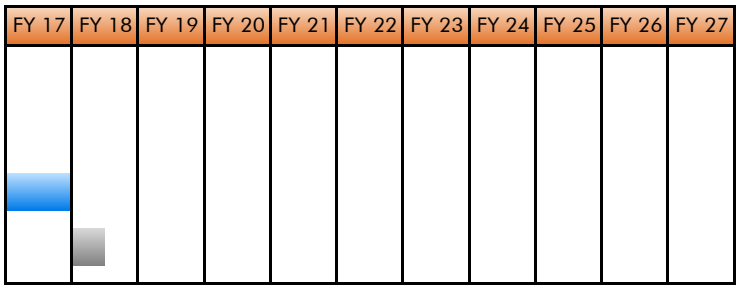
PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to December 2017

Phase	Cost
Plan	1,821
Design	2,414
Construct	13,673
Closeout	20
	17,928



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	8,022	3,697	232	0	0	0	0	0	11,951
with inflation	8,022	3,697	232	0	0	0	0	0	11,951
92224001-Penitencia Force Main Seismic Retrofit	14,003	8,865	442	0	0	0	0	0	23,310
with inflation	14,003	8,865	442	0	0	0	0	0	23,310
TOTAL:	22,025	12,562	674	0	0	0	0	0	35,261
Total with inflation	22,025	12,562	674	0	0	0	0	0	35,261

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	10,832	887	0	232	0	0	0	0	0	11,951
92224001-Penitencia Force Main Seismic Retrofit	14,108	8,760	0	442	0	0	0	0	0	23,310
TOTAL	24,940	9,647	0	674	0	0	0	0	0	35,261

Adjusted Budget includes adopted budget plus a planned budget adjustment of $475,000.

FUNDING SOURCES

(in thousands $)

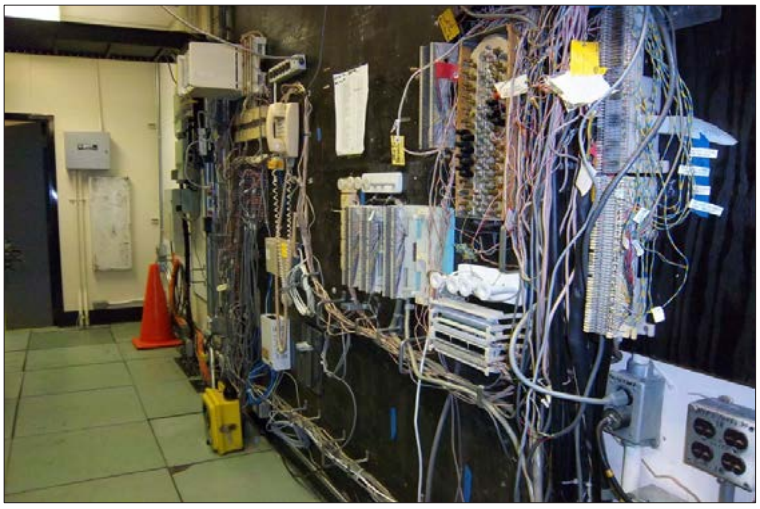
SCVWD Water Utility Enterprise Fund	35,261
Other Funding Source	0
Total	35,261

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**SCADA Remote Architecture and Communications Upgrade**
Program	Water Supply – Transmission
Priority No.	74
Project No.	92374005
District Contact	Christopher Hakes chakes@valleywater.org



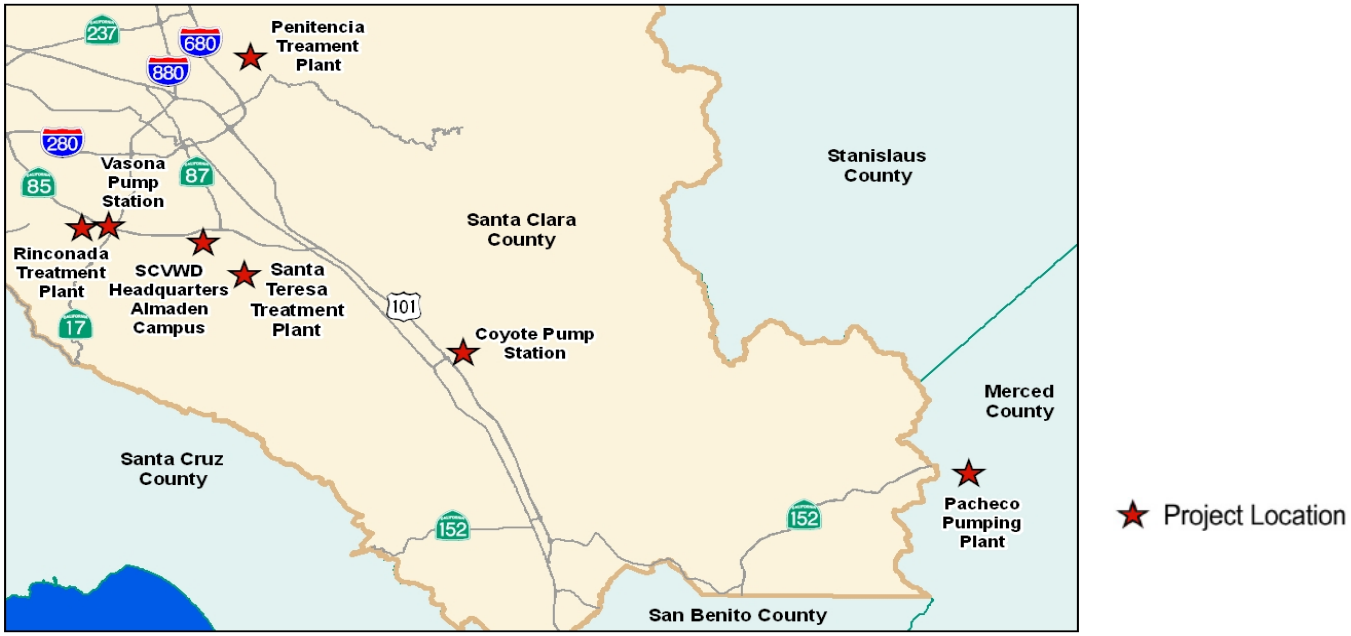
Raw Water Control Center Hub at Rinconada Water Treatment Plant similar to what will be installed at other facilities

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the back-up raw water control center and Process Control Systems (SCADA) telemetry to accomplish the following objectives:

- Complete the mobilizable raw water control center so it can be operated at any of the water treatment plants, pumping plants, or at District Headquarters/Almaden Campus.
- Upgrade the SCADA telemetry system to remove the single points of failure and to provide a robust and reliable telemetry system.

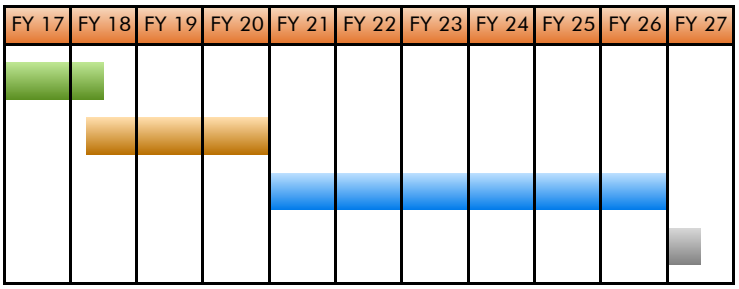
PROJECT LOCATION



SCHEDULE & STATUS

July 2015 to December 2026

Phase	Cost
Plan	741
Design	554
Construct	4,300
Closeout	100
	5,695



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92374005-SCADA Remote Architecture and Communications Upgrade	172	312	478	174	160	800	700	2,900	5,696
with inflation	172	312	478	188	180	936	852	3,909	7,027

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92374005-SCADA Remote Architecture and Communications Upgrade	402	374	292	186	188	180	936	852	3,909	7,027

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	5,485
San Benito County Water District	1,542
Total	**7,027**

OPERATING COST IMPACTS

The completion of this project is anitcipated to increase operating costs by approximately $80,440 per year, beginning in FY 2026 for operational support provided by control technicians, IT technicians, and SCADA engineers.

USEFUL LIFE: 25 Years

Project	**Small Capital Improvements, Raw Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	92764009
District Contact	Kurt Arends KArends@valleywater.org



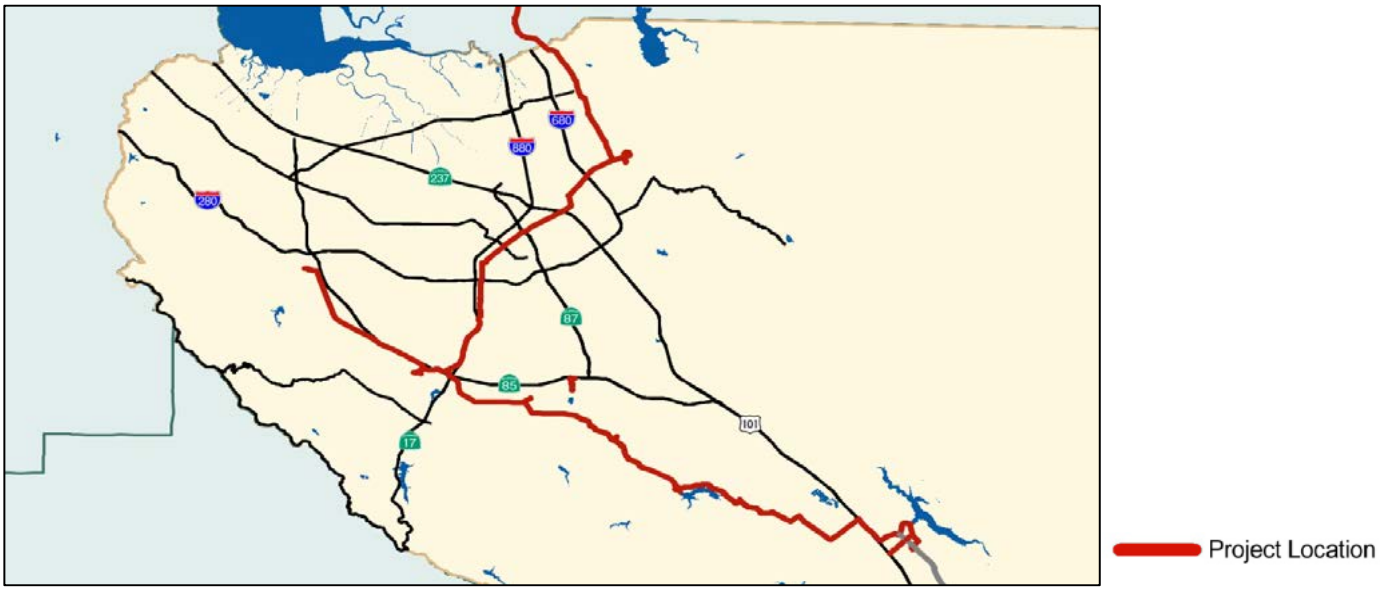
Major repair and replacement of turnout roofs and similar small raw water capital projects will be done, per the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing raw water distribution facilities. These activities include identifying and fixing corrosion problems, replacing valves and other appurtenances and modifying water recharge facilities to avoid failure of the raw water transmission system and extend the life of the infrastructure. This project is part of the District's 10-year asset management program. Planned projects for FY 17 include:

- Replace turnout roofs at the Piedmont Valve Yard, Calero Valve Yard, and Central Pipeline to Guadalupe Linevalve Vault.
- Replace valve and operator at Kirk Ditch.
- Replace flow meters at Kirk and Page Ditches.
- Anderson Force Main Visual Inspection - from Coyote Pumping Plant to Coyote Creek.

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	0	321	69	45	0	77	2,163	2,675
with inflation	n/a	0	321	75	51	0	94	3,212	3,752

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	0	0	321	75	51	0	94	3,212	3,752

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	3,752
Other Funding Source	0
Total	**3,752**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Small Capital Improvements, Treated Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	94764006
District Contact	Kurt Arends KArends@valleywater.org

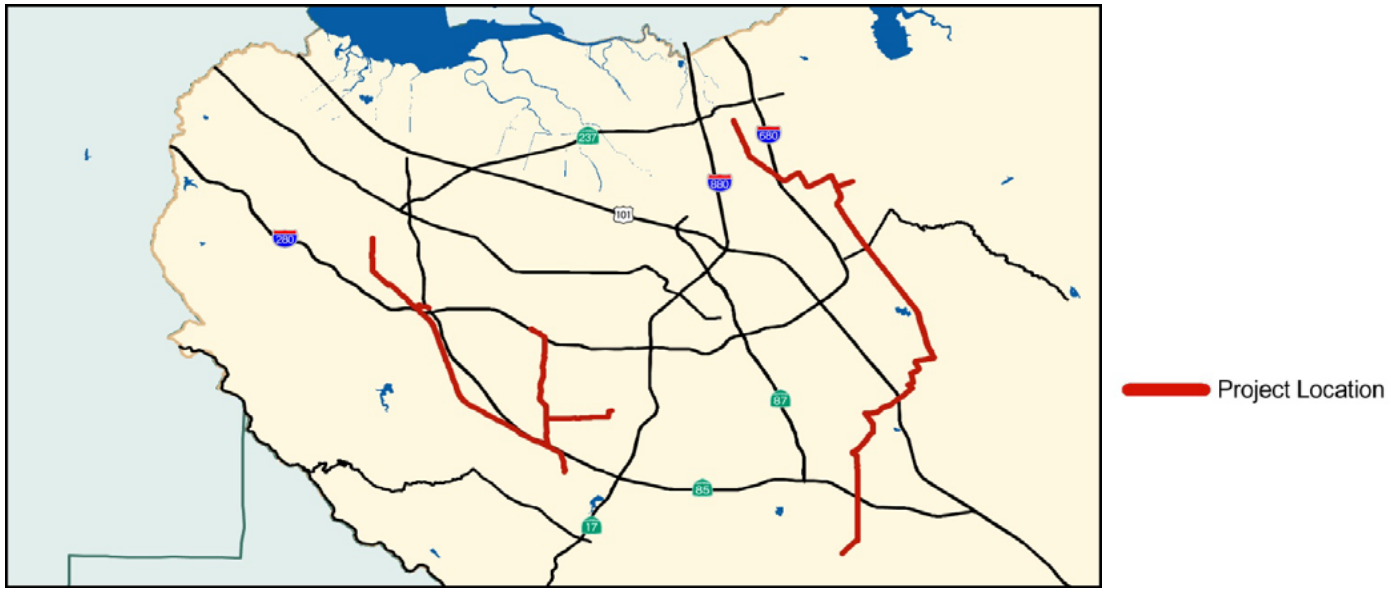


Small Capital projects at treated water transmission facilities, similar to this new valve installation in the Piedmont Line Valve Vault, will be done, per the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing treated water distribution facilities, such as identifying and treating corrosion problems, replacing valves and other appurtenances and repairing or adding turnouts to avoid failure of the treated water transmission system and to extend the life of the infrastructure. This project is part of the District's 10-year asset management program. No activities planned for FY 2018.

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	133	0	0	0	0	133
with inflation	n/a	0	0	144	0	0	0	0	144

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	0	144	0	0	0	0	144

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	144
Other Funding Source	0
Total	**144**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Vasona Pumping Plant Upgrades**
Program	Water Supply – Transmission
Priority No.	67
Project No.	92264001
District Contact	Christopher Hakes CHakes@valleywater.org



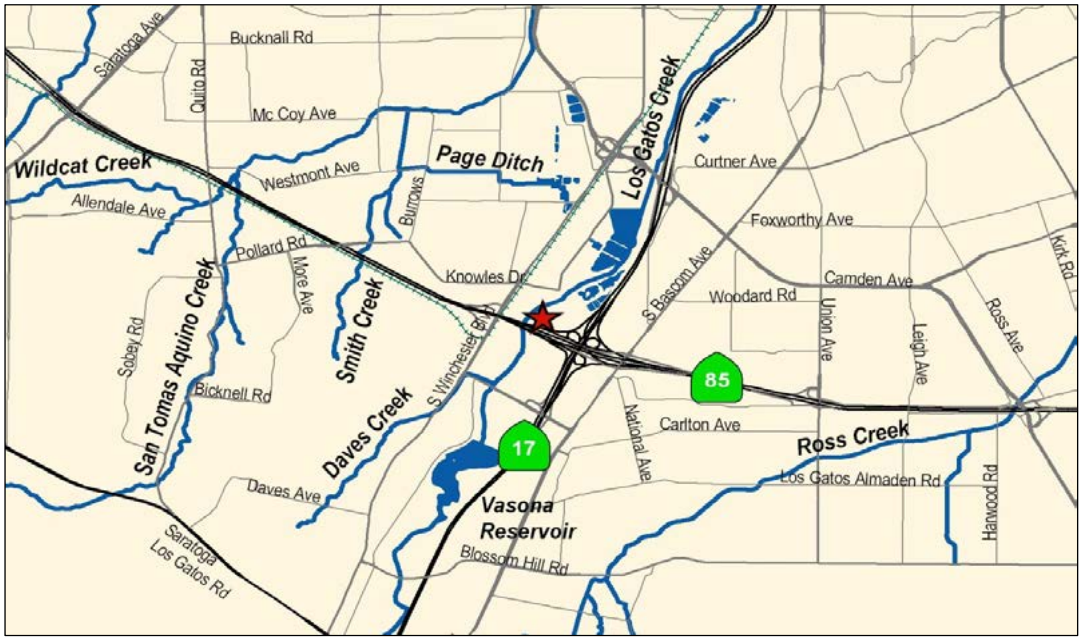
Vasona Pumping Plant Pump

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Vasona Pump Station, including replacing aging pumps, motors, drives, valves, actuators, and electrical and control systems that have reached the end of their useful life; and adding one redundant pump. The project will accomplish the following objectives:

- Eliminate the risk of failure by replacing assets that have reached the end of their useful life, including four pumps (two 200 horsepower, two 400 horsepower) and associated motors, drives, electrical and control systems, as well as pump discharge and suction valves and actuators.
- Increase operational flexibility and prepare for future capacity needs by adding one redundant pump and increasing the size of the two 200 horsepower pumps.

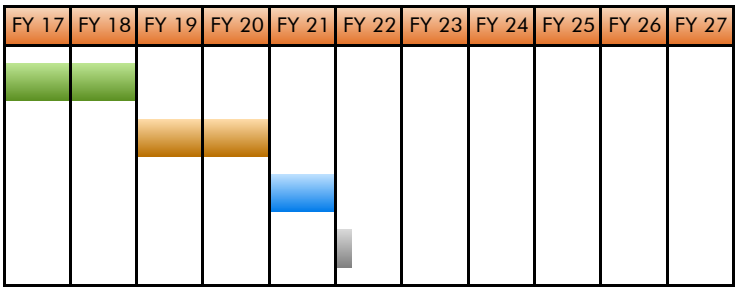
PROJECT LOCATION



SCHEDULE & STATUS

July 2016 to September 2020

Phase	Cost
Plan	570
Design	2,360
Construct	15,600
Closeout	70
	18,600



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
92264001-Vasona Pumping Plant Upgrades	0	50	781	639	1,460	15,600	70	0	18,600
with inflation	0	50	781	691	1,642	17,673	85	0	20,923

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
92264001-Vasona Pumping Plant Upgrades	0	119	69	712	691	1,642	17,673	85	0	20,923

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	20,923
Other Funding Sources	0
Total	**20,923**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $70,000 per year beginning in FY 2023.

USEFUL LIFE: 50 years

Project	**Fluoridation at Water Treatment Plants**
Program	Water Supply – Treatment
Priority No.	47
Project No.	93084011
District Contact	Christopher Hakes CHakes@valleywater.org

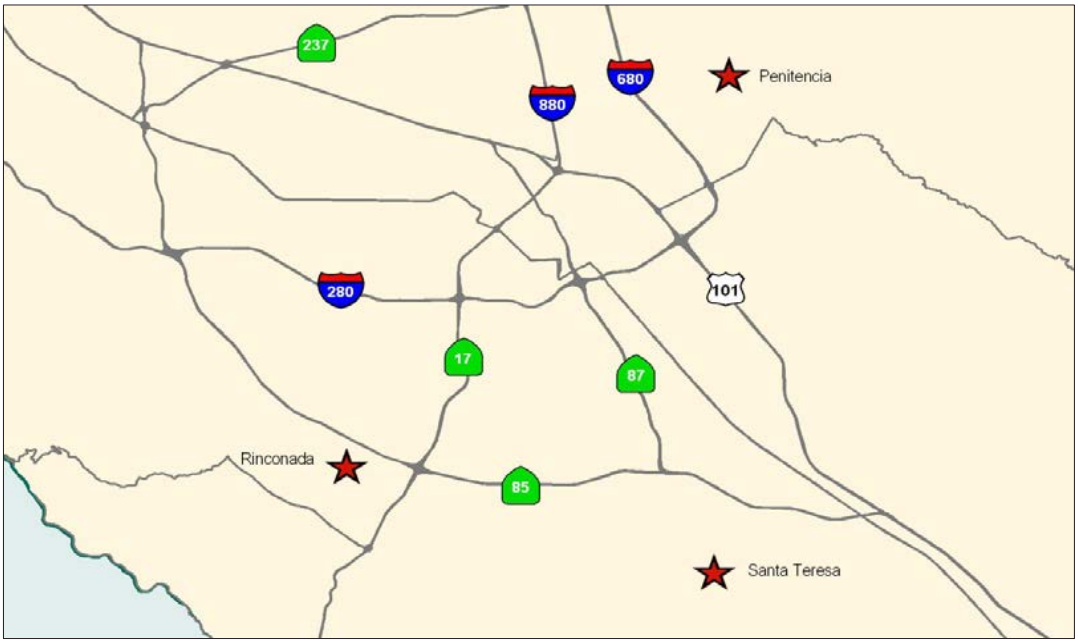


Chemical storage tank and associated hardware will be installed at the water treatment plants for the fluoridation process

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements at the water treatment plants to provide fluoridation facilities that will include fluorosilicic acid storage tanks, tank foundations, chemical feed facilities, spill containment, storage and feed equipment areas, piping, online fluoride analyzers, and accessories.

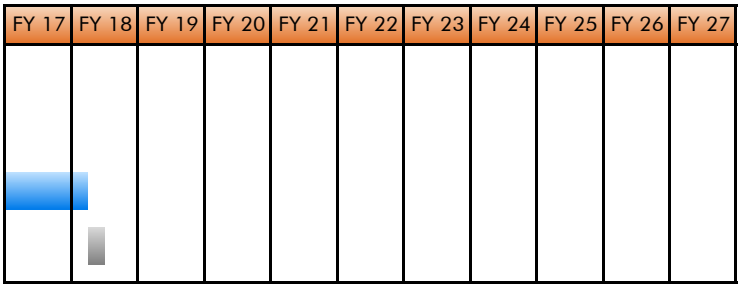
PROJECT LOCATION



SCHEDULE & STATUS

September 2013 to December 2017

Phase	Cost
Plan	230
Design	1,634
Construct	8,141
Closeout	98
	10,103



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93084011-Fluoridation at Water Treatment Plants	6,956	2,872	333	0	0	0	0	0	10,161
with inflation	6,956	2,872	333	0	0	0	0	0	10,161

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93084011-Fluoridation at Water Treatment Plants	6,875	3,009	56	277	0	0	0	0	0	10,161

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	7,761
The Health Trust	1,000
First 5 of Santa Clara County	900
California Dental Association Foundation	500
Total	**10,161**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1,000,000 per year, beginning in FY 2018.

USEFUL LIFE:

Fluoride System: 10 years
Bulk Storage Tanks: 20 years

Project IRP2 WTP Operations Buildings Seismic Retrofit
Program Water Supply - Treatment **Priority No.** 67
District Contact Christopher Hakes CHakes@valleywater.org **Project No.** 93764003



The RWTP control building is one of the four buildings that will be studied and possibly retrofitted to meet safety requirements



The PWTP control building is another of the four buildings that will be studied and possibly retrofitted to meet safety requirements

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements, including seismic retrofitting of two water treatment plant operations buildings and two buildings at the Vasona Pump Station that were built prior to 1980, as defined in the Water Infrastructure Reliability Plan, Portfolio 2 (IRP2), to ensure a healthy and safe work environment for employees and provide for continued functionality of these critical facilities after a major earthquake.

In addition, this Project will consider some non-structural elements of the Rinconada Water Treatment Plant (RWTP) Control Building, such as space reallocation, Americans with Disablities Act (ADA) improvements, and heating, ventilation, and air conditioning (HVAC) system rehabilitation.

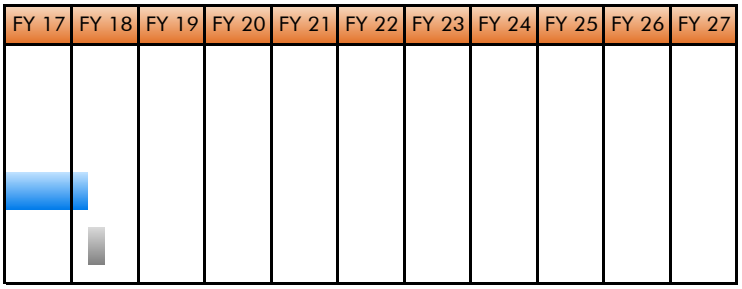
PROJECT LOCATION



SCHEDULE & STATUS

January 2008 to September 2017

Phase	Cost
Plan	1,423
Design	2,978
Construct	14,456
Closeout	55
	18,912



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	20,868	1,291	346	0	0	0	0	0	22,505
with inflation	20,868	1,291	346	0	0	0	0	0	22,505

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	20,992	1,167	0	346	0	0	0	0	0	22,505

Adjusted Budget includes adopted budget plus a planned budget adjustment of $369,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	21,801
Federal Emergency Management Agency (FEMA)	704
Total	**22,505**

OPERATING COST IMPACTS

Completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not alter the existing modes of operation. However, seismic retrofit will reduce or avoid structural damages and reduce the cost of post-earthquake repairs.

USEFUL LIFE: 50+ Years

Project	**PWTP Clearwell Recoating and Repair**
Program	Water Supply – Treatment
Priority No.	66
Project No.	93234043
District Contact	Christopher Hakes CHakes@valleywater.org



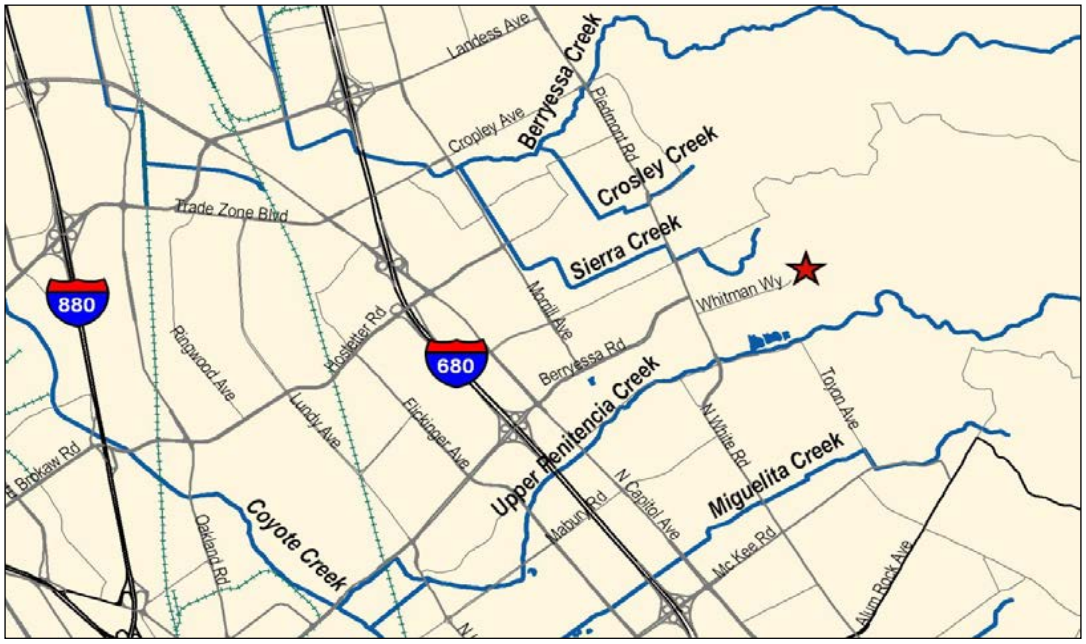
Active corrosion of the rafters and rafter support

PROJECT DESCRIPTION

This project plans, designs, and constructs corrosion repairs to the existing clearwell at Penitencia Water Treatment Plant (PWTP) to accomplish the following objectives:

- Extend the life of the PWTP Clearwell by replacing the roof and removing as much corrosion as possible from the walls and recoating surfaces as necessary.
- Replace the existing roof and supports to address the corrosion as identified in the January 2009 report by Bay Area Coating Consultants.

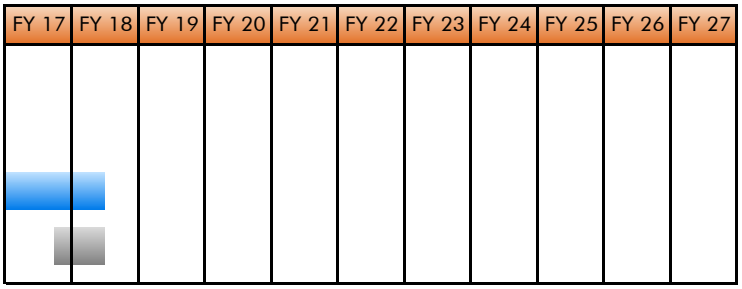
PROJECT LOCATION



SCHEDULE & STATUS

July 2010 to December 2017

Phase	Cost
Plan	530
Design	550
Construct	983
Closeout	26
	2,089



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93234043-PWTP Clearwell Recoating and Repair	5,562	610	278	0	0	0	0	0	6,450
with inflation	5,562	610	278	0	0	0	0	0	6,450

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93234043-PWTP Clearwell Recoating and Repair	5,919	550	297	0	0	0	0	0	0	6,469

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately $19,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,469
Other Funding Source	0
Total	**6,469**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs as it does not alter existing modes of operation.

USEFUL LIFE: 15 Years

Project **PWTP Residuals Management**
Program Water Supply - Treatment
District Contact Katherine Oven koven@valleywater.org

Priority No. 74
Project No. 93234044



Existing belt press to be replaced with new residuals management facility



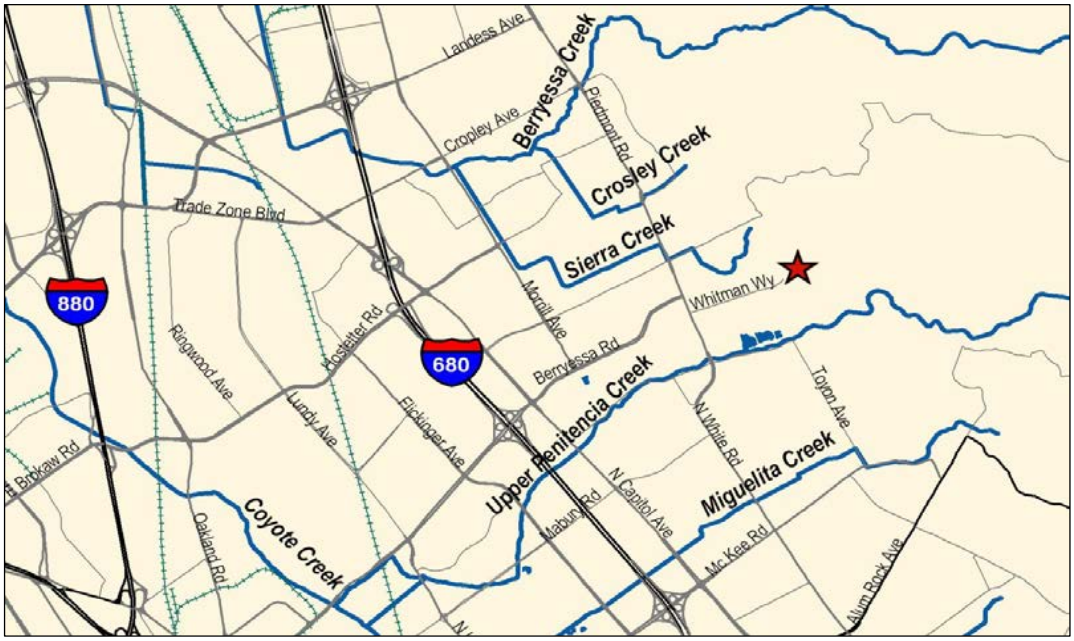
Existing belt press to be replaced with new residuals management facility

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Penitencia Water Treatment Plant (PWTP) residuals management process to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize or eliminate (existing) operational constraints and impacts to the drinking water treatment process.
- Minimize risk of discharge violations.
- Improve the reliability of PWTP.

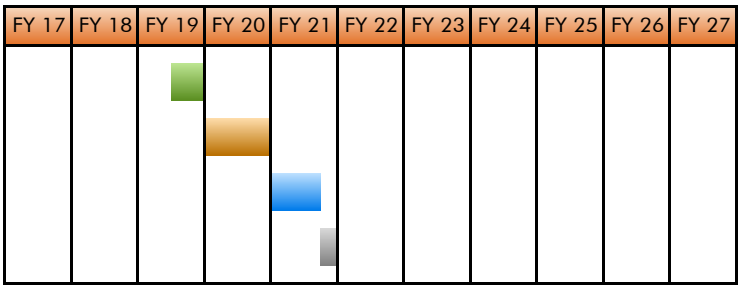
PROJECT LOCATION



SCHEDULE & STATUS

January 2019 to June 2021

Phase	Cost
Plan	650
Design	1,300
Construct	6,925
Closeout	-
	8,875



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93234044-PWTP Residuals Management	0	0	0	650	1,300	6,925	0	0	8,875
with inflation	0	0	0	703	1,462	7,835	0	0	10,001

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93234044-PWTP Residuals Management	0	0	0	0	703	1,462	7,835	0	0	10,001

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	10,001
Other Funding Sources	0
Total	**10,001**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE:

Not Available

Project RWTP FRP Residuals Management
Program Water Supply - Treatment
District Contact Christopher Hakes CHakes@valleywater.org

Priority No. 84
Project No. 93294051



Centrifuge for mechanical dewatering of sludge



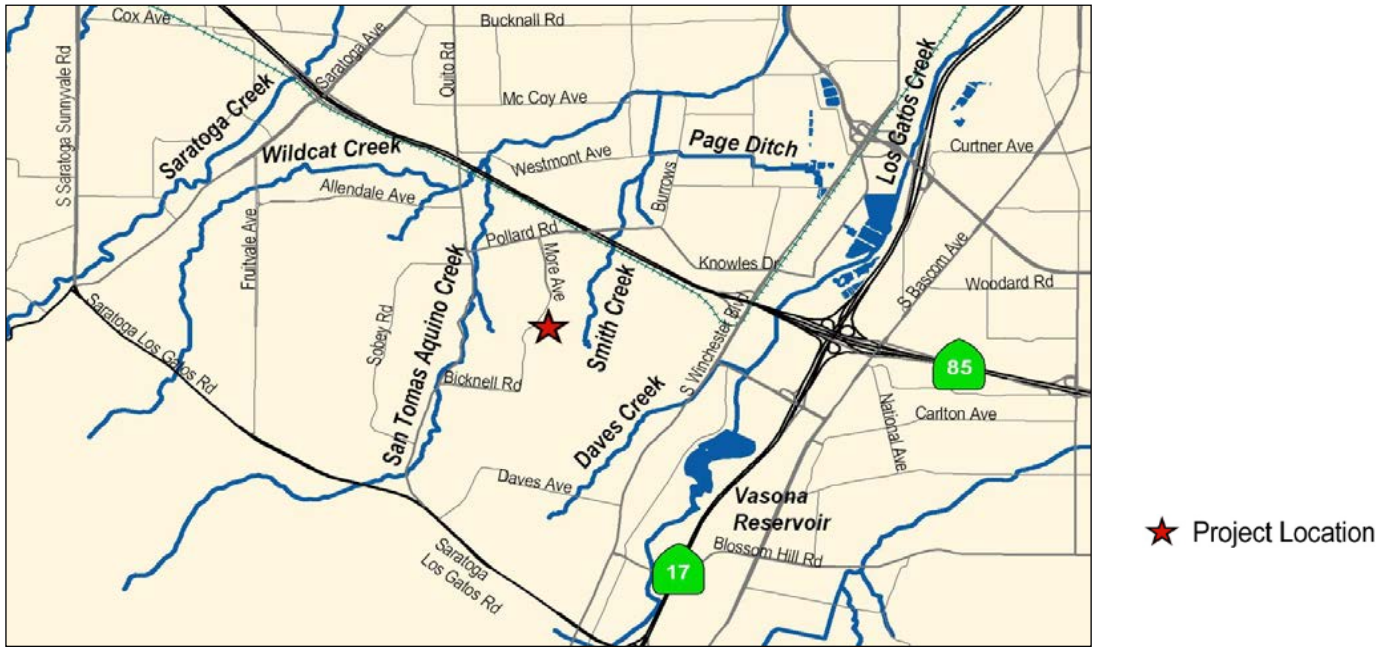
New Gravity Thickeners and Mix Tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes, consistent with the Facility Renewal Program (FRP) to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize risk of discharge violations.
- Improve the reliability of RWTP.

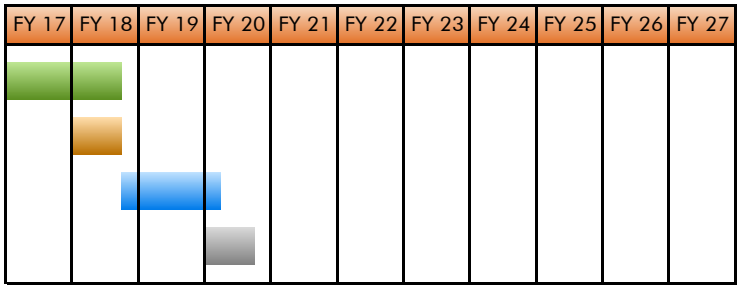
PROJECT LOCATION



SCHEDULE & STATUS

July 2008 to March 2020

Phase	Cost
Plan	1,484
Design	5,713
Construct	43,873
Closeout	380
	51,450



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93294051-RWTP FRP Residuals Management	25,911	5,588	17,054	2,552	358	0	0	0	51,463
with inflation	25,911	5,588	17,054	2,760	403	0	0	0	51,716

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93294051-RWTP FRP Residuals Management	26,096	5,403	0	17,054	2,760	403	0	0	0	51,716

Adjusted Budget includes adopted budget plus a planned budget adjustment for $3,335,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	51,716
Other Funding Source	0
Total	**51,716**

OPERATING COST IMPACTS

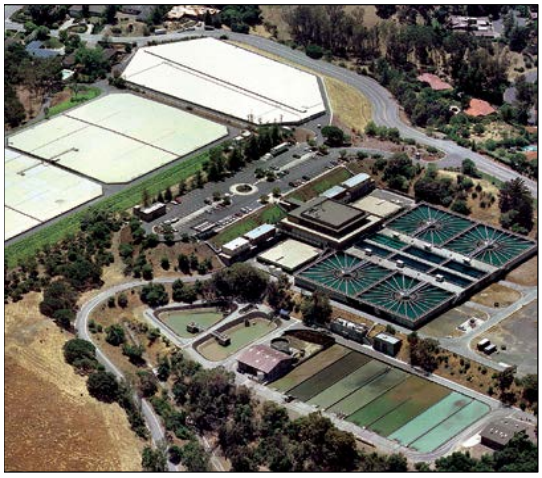
The completion of this project is anticipated to decrease annual operating costs by approximately $200,000 per year starting in 2021.

USEFUL LIFE:

Structures – 50 Years; Mechanical Equipment – 15 Years; Electrical Equipment – 10 Years

Project RWTP Reliability Improvement
Program Water Supply - Treatment
District Contact Christoper Hakes CHakes@valleywater.org

Priority No. 91
Project No. 93294057



Aerial view of the
Rinconada Water Treatment Plant facing west



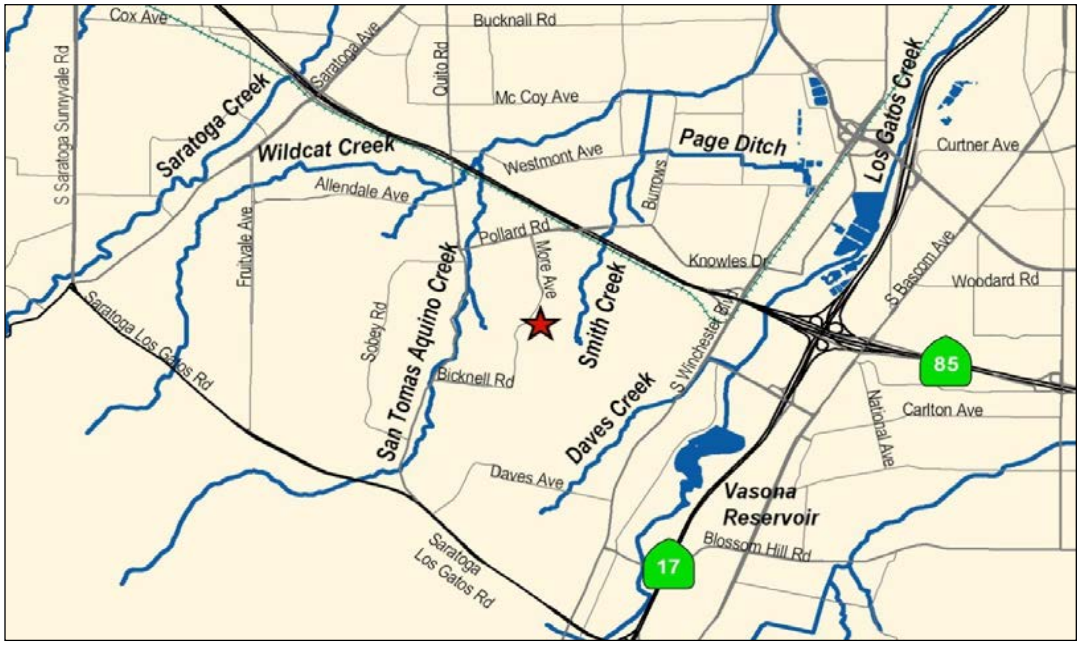
Artist rendering of the aerial view of the Rinconada
Water Treatment Plant facing south after construction

PROJECT DESCRIPTION

This project plans, designs, and constructs new facilities at Rinconada Water Treatment Plant (RWTP) that will improve plant reliability by accomplishing the following objectives:

- Construct a new raw water ozonation facility.
- Construct a new flocculation and plate settler clarification facility.
- Implement a dual media filtration system.
- Increase plant capacity to 100 million gallons per day (MGD).

PROJECT LOCATION

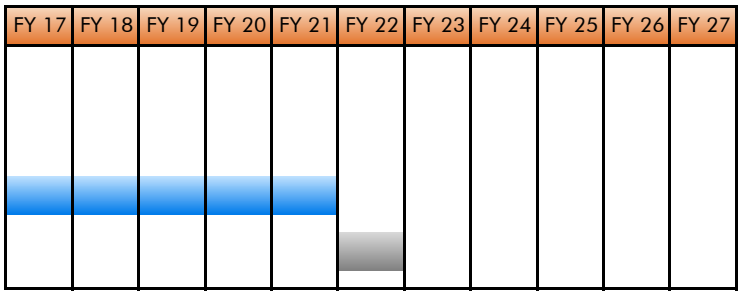


★ Project Location

SCHEDULE & STATUS

July 2009 to June 2022

Phase	Cost
Plan	1,855
Design	19,196
Construct	253,792
Closeout	120
	274,963



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294057-RWTP Reliability Improvement	71,924	44,763	48,144	46,700	46,700	28,615	120	0	286,966
with inflation	71,924	44,763	48,144	47,524	47,961	30,421	146	0	290,883

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93294057-RWTP Reliability Improvement	71,509	45,178	0	48,144	47,524	47,961	30,421	146	0	290,883

Adjusted Budget includes adopted budget plus a planned budget adjustment of $466,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	290,883
Other Funding Source	0
Total	290,883

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1.4 million per year, beginning in FY 2023. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE:

Media – 20 Years; Structures – 50 Years; Equipment – 15 Years

Project	**RWTP Treated Water Valves Upgrade**
Program	Water Supply – Treatment
Priority No.	84
Project No.	93294056
District Contact	Christopher Hakes CHakes@valleywater.org



Example of a valve to be replaced or upgraded

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) including seismically strengthening the chemical storage structures; replacing/upgrading the valves and appurtenances used to control treated water at the clearwells and the Ronconada Reservoir; repairing a damaged baffle wall in the Rinconada Reservoir; and installing a 48-inch magnetic flow meter on the treatment plant's treated water effluent pipeline. Consistent with the Facility Renewal Program (FRP), this project will accomplish the following objectives:

- Ensure plant operational reliability.
- Improve ability to maintain the plant.
- Allow for better isolation of the treated water control valves for future work.
- Achieve greater accuracy in measuring treated water deliveries.

PROJECT LOCATION

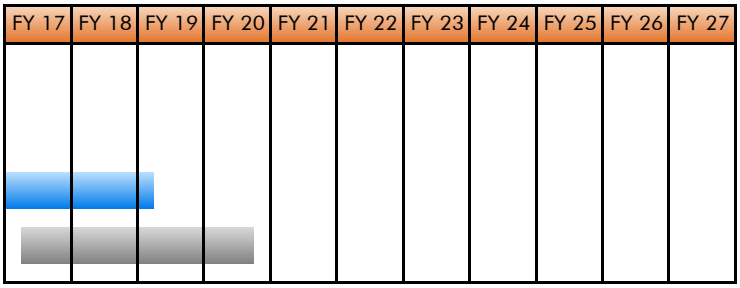


★ Project Location

SCHEDULE & STATUS

July 2009 to March 2020

Phase	Cost
Plan	465
Design	1,476
Construct	6,842
Closeout	113
	8,896



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
93294056-RWTP Treated Water Valves Upgrade	8,030	530	170	173	20	0	0	0	8,923
with inflation	8,030	530	170	187	22	0	0	0	8,940

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
93294056-RWTP Treated Water Valves Upgrade	8,369	191	0	170	187	22	0	0	0	8,940

Adjusted Budget includes adopted budget plus a planned budget adjustment of $136,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,940
Other Funding Source	0
Total	**8,940**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operations.

USEFUL LIFE: 40 Years

Project	**Small Capital Improvements, Water Treatment**
Program	Water Supply – Treatment
Priority No.	73
Project No.	93764004
District Contact	Angela Cheung acheung@valleywater.org



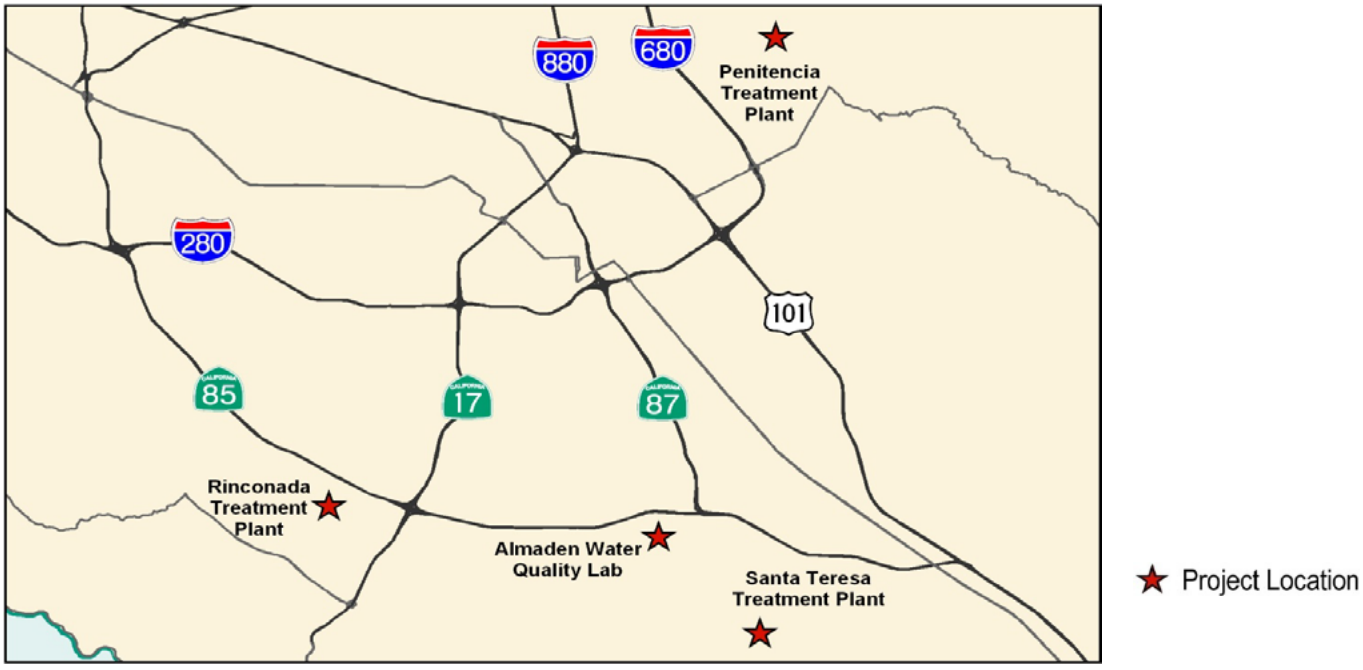
Sludge pond sediment removal at Santa Teresa Water Treatment Plant

PROJECT DESCRIPTION

This project provides resources for small capital improvements that replace or extend the life of an asset. This project implements a systematic approach of equipment replacement and renewal at the three water treatment plants and laboratory by designing and constructing improvements identified as part of the District's 10-year asset management program. Typical activities included in this project include pump, motor, instrumentation and valve replacement; chemical tank repairs; and large-scale renewal and replacement activities like clarifier mechanism overhaul and replacement. Planned projects to complete for Santa Teresa Water Treatment Plant (STWTP), Penitencia Water Treatment Plan (PWTP), Rinconada Water Treatment Plant (RWTP, West Pipeline, and Silicon Valley Advanced Water Purification Center (SVAWPC) include:

- Provide engineering, supplies, and services support for the Sulfuric Acid Water Quality project.
- Purchase the Laboratory Information Management System (LIMS) and the Gas Chromatograph/Mass Spectrometer (GCMS).
- Complete Small Capital Projects at STWTP, RWTP, PWTP and Campbell Well Field.

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	3,216	2,512	5,958	6,725	6,732	3,247	11,461	39,851
with inflation	n/a	3,216	2,512	6,444	7,565	7,875	3,950	17,154	48,717

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	3,216	0	2,512	6,444	7,565	7,875	3,950	17,154	48,717

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Excess funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	48,717
Other Funding Source	0
Total	**48,717**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Expedited Purified Water Program**
Program	Water Supply – Recycled Water
Priority No.	71
Project No.	91304001s
District Contact	Katherine Oven KOven@valleywater.org



Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

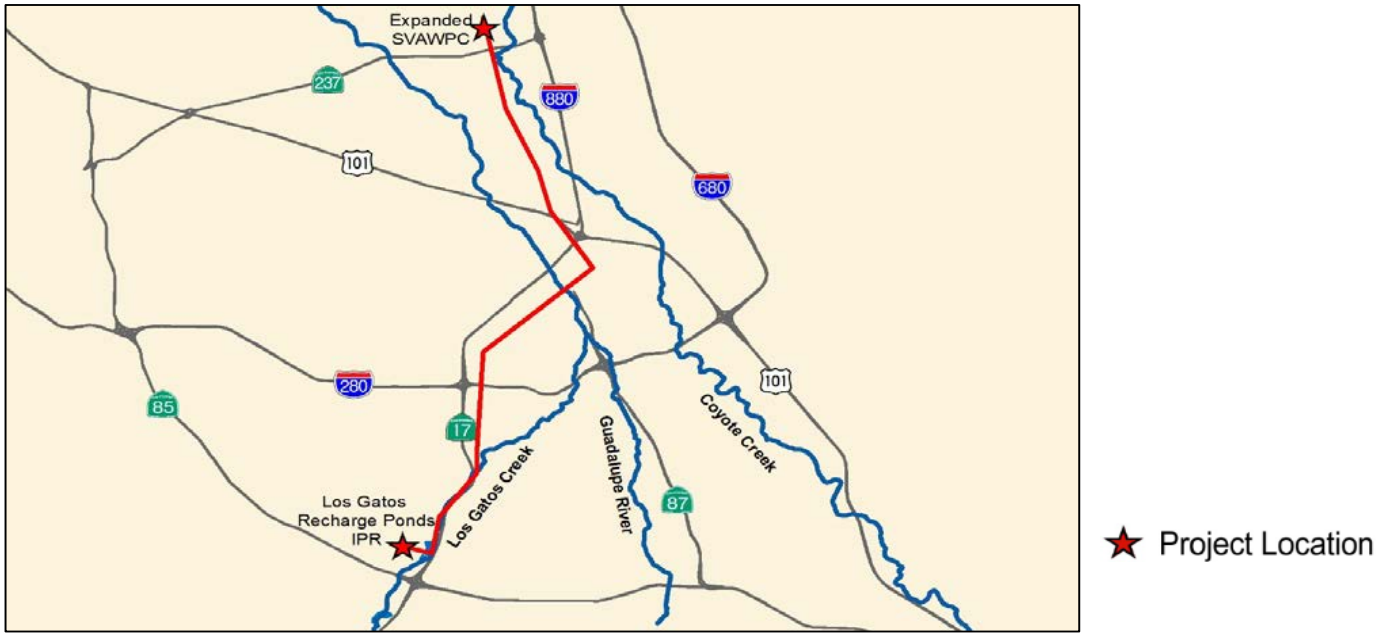
This project plans, designs, and constructs new infrastructure, proposed in the District's 2012 Water Supply Master Plan, to accomplish the following objectives:

- Expand the District's long-term water supply portfolio.
- Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- Expansion of the Silicon Valley Advanced Water Purification Center to produce up to an additional 24 million gallons per day (MGD) of advanced purified water.
- Installation of pipelines to convey advanced purified water to the District's existing groundwater recharge ponds for indirect potable reuse, or to the District's conventional surface water treatment plants for use as raw water augmentation (direct potable reuse).
- Installation of purified water injection wells at strategic locations to improve groundwater basin management.

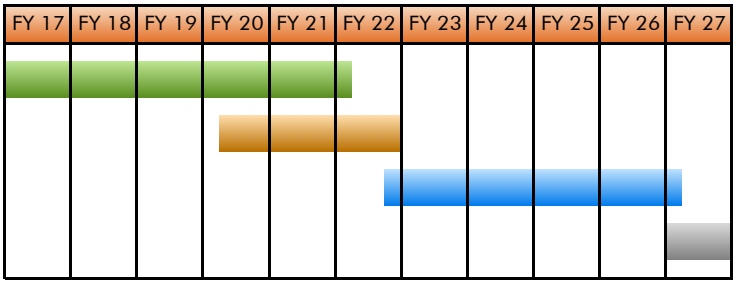
PROJECT LOCATION



SCHEDULE & STATUS

April 2015 to June 2027

Phase	Cost
Plan	10,826
Design	53,347
Construct	469,749
Closeout	850
	534,772



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	15,291	3,120	520	0	0	0	0	0	18,931
with inflation	15,291	3,120	520	0	0	0	0	0	18,931
91284009 - Silicon Valley Advanced Water Purification Center Expansion	654	100	156	150	10,861	14,583	21,034	254,848	302,386
with inflation	654	100	156	162	12,217	17,060	62,024	262,658	355,032
91384001 - Purified Water Pipelines	0	100	156	150	9,402	7,051	14,920	194,400	226,179
with inflation	0	100	156	162	10,576	8,249	46,765	198,642	264,650
TOTAL	**15,945**	**3,320**	**832**	**300**	**20,263**	**21,634**	**35,954**	**449,248**	**547,496**
with inflation	**15,945**	**3,320**	**832**	**324**	**22,793**	**25,309**	**108,789**	**461,300**	**638,613**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	17,200	2,090	879	0	0	0	0	0	0	19,290
91284009 - Silicon Valley Advanced Water Purification Center Expansion	1,282	4,228	4,756	0	0	7,779	17,060	62,024	262,658	355,032
91384001 - Purified Water Pipelines	0	3,351	3,251	0	0	7,643	8,249	46,765	198,642	264,650
TOTAL	**18,482**	**9,669**	**8,886**	**0**	**0**	**15,423**	**25,309**	**108,789**	**461,300**	**638,972**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funds exceed planned expenditures by approximately $359,000. Excess funds will be returned to fund reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	638,972
Other Funding Sources	0
Total	**638,972**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**Long-Term Purified Water Program Elements**
Program	Water Supply – Recycled Water
Priority No.	71
Project No.	91C40389
District Contact	Katherine Oven koven@valleywater.org



Water is exposed to ultraviolet light in purification process

PROJECT DESCRIPTION

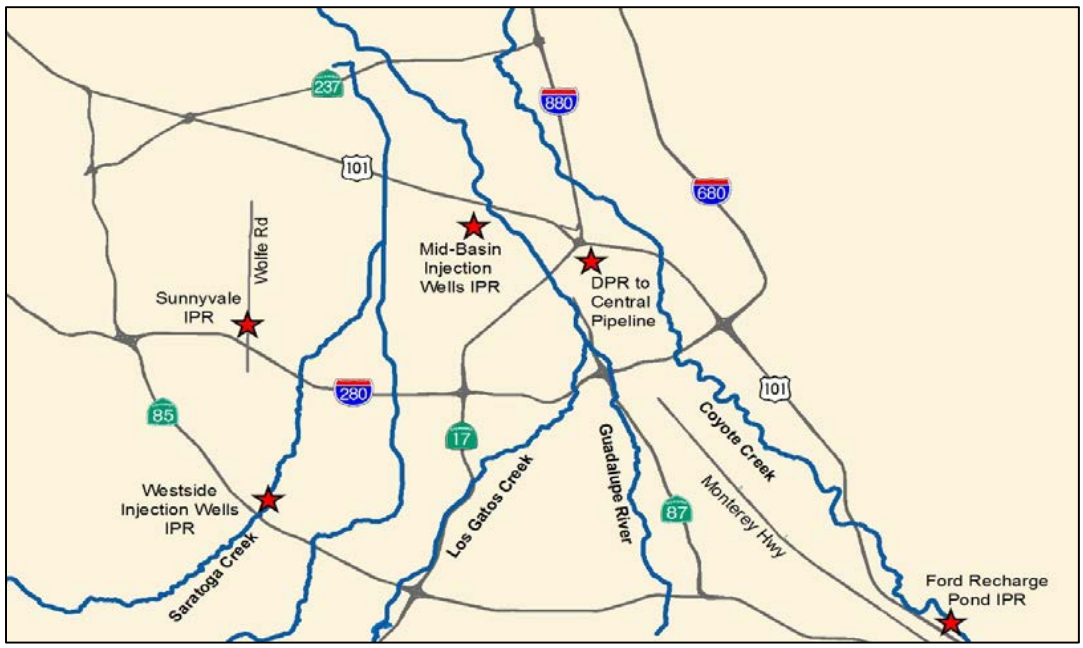
This project plans, designs, and constructs new infrastructure to accomplish the following objectives:

- Expand the District's long-term water supply portfolio beyond 2040.
- Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- Installation of purified water injection wells at strategic locations to improve groundwater basin management.
- Construction and operation of an advanced water purification center for groundwater recharge at Ford Ponds.
- Partnership with the City of Sunnyvale to implement advanced water purification facilities at the City's wastewater treatment plant for groundwater recharge.

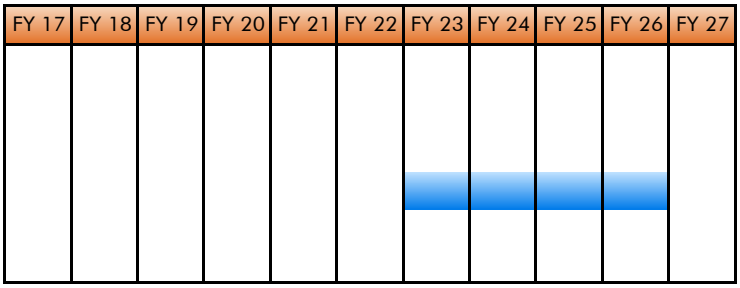
PROJECT LOCATION



SCHEDULE & STATUS

July 2022 to June 2026

Phase	Cost
Plan	-
Design	-
Construct	284,498
Closeout	-
	284,498



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91C40389 - Long-term Purified Water Program Elements	0	0	0	0	0	0	0	284,498	284,498
with inflation	0	0	0	0	0	0	0	355,301	355,301
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**284,498**	**284,498**
with inflation	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**355,301**	**355,301**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
91C40389 - Long-term Purified Water Program Elements	0	0	0	0	0	0	0	0	355,301	355,301
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**355,301**	**355,301**

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	355,301
Other Funding Sources	0
Total	**355,301**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Priority No.	52
Project No.	91094007s
District Contact	Christopher Hakes CHakes@valleywater.org



Recycled water purple pipeline waiting to be laid during construction of Immediate Term project

PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan accepted in December 2004 to improve system redundancy, reliability, and capacity. The current Master Plan report presents a 20-year capital program for expanding water recycling in South County in three phases; Immediate Term, Short Term, and Long Term:

Completed:

- 91094007 Gilroy Pipelines and Reservoir (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the SCRWA treatment plant.
- 91094008 Gilroy Pipelines (Short Term) Phase 1A, installation of approximately 3000 feet of 30-inch and 36-inch pipeline.

Currently Underway:

- 91094009 Gilroy Pipelines (Short Term) Phase 1B/2A will construct an additional 14,000 linear feet of pipeline.
- 91094010 Gilroy Pipelines (Short Term) Phase 2 will be completed through cost-sharing opportunities with the City of Gilroy and land developers to construct approximately 3,900 linear feet of 30-inch diameter pipe.
- 91094010 Gilroy Pipelines (Long-Term) Phase 1 to be completed through cost-sharing opportunities with the land developers through coordination by the City of Gilroy to construct approximately 9,200 linear feet of 24-inch diameter pipe.

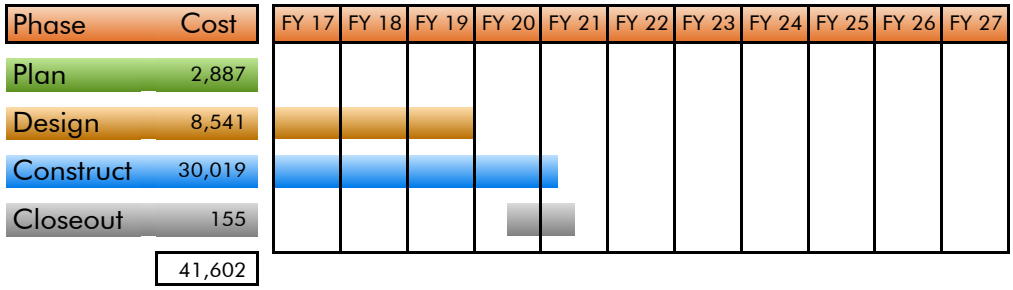
PROJECT LOCATION



SCHEDULE & STATUS

July 2009 to November 2020

The schedule chart shows Short-Term Phase 1B and Phase 2 projects only. The Immediate-Term and Short-Term Phase 1A projects are complete.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	3,257
with inflation	3,257	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	5,391
with inflation	5,391	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	8,043	428	312	9,476	9,642	194	0	0	28,095
with inflation	8,043	428	312	10,109	10,629	227	0	0	29,748
91094010-South County Recycled Water Pipeline - Short Term 2	3,799	3,608	433	320	320	0	0	0	8,480
with inflation	3,799	3,608	433	340	350	0	0	0	8,530
TOTAL	**20,490**	**4,036**	**745**	**9,796**	**9,962**	**194**	**0**	**0**	**45,223**
with inflation	**20,490**	**4,036**	**745**	**10,449**	**10,979**	**227**	**0**	**0**	**46,926**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	11,028	15,772	18,329	0	0	2,721	227	0	0	29,748
91094010-South County Recycled Water Pipeline - Short Term 2	8,108	0	701	0	72	350	0	0	0	8,530
TOTAL	**27,784**	**15,772**	**19,030**	**0**	**72**	**3,071**	**227**	**0**	**0**	**46,926**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	40,923
South County Regional Wastewater Authority	708
United States Bureau of Reclamation (USBR) ARRA	1,295
United States Bureau of Reclamation (USBR) Title 16	4,000
Total	**46,926**

OPERATING COST IMPACTS

Estimated District share of the operating and maintenance costs are $8,000 per year for the Immediate-Term phase, beginning in FY 2007 and an additional $25,000 for the Short-Term Phase 1, beginning in FY 2019. Increases for Immediate Term are primarily labor costs for operating the new 3mg reservoir and its pump station. Increases for Short Term are labor and materials to maintain the 42,000 feet of new pipeline, exercising valves and cathodic protection.

USEFUL LIFE: Pipelines – 50 Year; Pumps – 20 Years

Project	**Wolfe Road Recycled Water Facility**
Program	Water Supply – Recycled Water
Priority No.	61
Project No.	91244001
District Contact	Christopher Hakes CHakes@valleywater.org



Artist's rendering of the new Apple campus and surrounding grounds that will be maintained using recycled water supplied by the Wolfe Road pipeline

PROJECT DESCRIPTION

This project plans, designs, and constructs approximately 13,300 linear feet of pipeline along Wolfe Road to deliver recycled water to the west side of Sunnyvale and the new Apple campus in Cupertino.

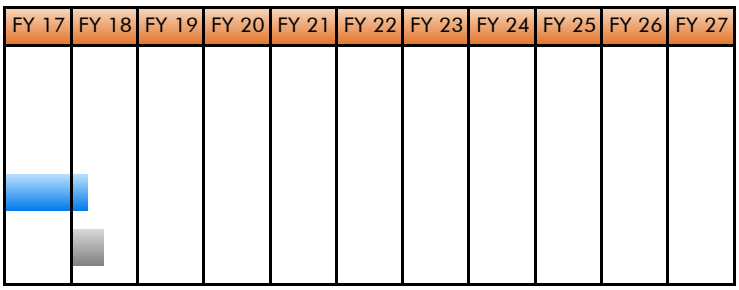
PROJECT LOCATION



SCHEDULE & STATUS

September 2013 to December 2017

Phase	Cost
Plan	6
Design	2,102
Construct	2,920
Closeout	17
	5,045



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
91244001-Wolfe Road Recycled Water Facility	13,042	1,644	340	0	0	0	0	0	15,026
with inflation	13,042	1,644	340	0	0	0	0	0	15,026

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
91244001-Wolfe Road Recycled Water Facility	14,171	657	142	198	0	0	0	0	0	15,026

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	4,126
Apple Inc.	4,800
California Department of Water Resources	2,500
Cal Water	1,500
City of Sunnyvale	2,100
Total	**15,026**

OPERATING COST IMPACTS

The operating budget impact to operate and maintain the Wolfe Rd. Recycled Water Facilities is estimated to be $25,000 per year beginning in FY19, plus power costs of approximately $56 per each acre-foot of water delivered.

USEFUL LIFE: 50 Years

Flood Protection Capital Improvements

FLOOD PROTECTION OVERVIEW

The District manages approximately 800 miles of creeks in Santa Clara County to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations." The district's goals are further defined in E-3.1, "Provide natural flood protection for residents, businesses, and visitors" and E-3.2, "Reduce potential for flood damages." The 800 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. The District administers an asset management program for its flood protection infrastructure. The program includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

Fifty years of working for flood protection has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005 the District had provided flood protection to 93,253 of the 166,526 parcels in the flood plain and another 6,642 have been protected since then.

The voters in Santa Clara County have supported the District's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters approved a special parcel tax in 2000 and 2012 to fund the continuation of the District's flood protection capital improvements, specifically, moving upstream from the completed downstream work or starting new work on creeks that have not had flood protection work.

Lower Peninsula Watershed

Major Capital Improvements Completed

- Adobe Creek from El Camino to West Edith Ave.
- Barron Creek
- Matadero Creek from Palo Alto Flood Basin to Barron Creek
- Stevens Creek from Highway 101 to Homestead Road

Major Capital Improvements Identified in the CIP

- Palo Alto Flood Basin Structure Improvements
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)
- San Francisquito Creek from S.F. Bay to Searsville Dam (Clean, Safe Creeks/Safe, Clean Water)

West Valley Watershed

Major Capital Improvements Completed

- Calabazas Creek from Guadalupe Slough to Wardell Road
- San Tomas Creek from Southern Pacific Railroad to Cabrillo Avenue
- Saratoga Creek from San Tomas Creek to Lawrence Expressway

Major Capital Improvements Identified in the CIP

- Sunnyvale East and West Channels (Clean, Safe Creeks)

Guadalupe Watershed

Major Capital Improvements Completed

- Alamitos Creek
- Guadalupe River–Lower from Alviso Marina to Interstate 880
- Guadalupe River–Downtown from Interstate 880 to Interstate 280

Major Capital Improvements Identified in the CIP

- Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (Clean, Safe Creeks/Safe, Clean Water)

Coyote Watershed

Major Capital Improvements Completed

- Coyote Creek from S.F. Bay to Montague Expressway
- Lower Penitencia Creek from Coyote Creek to Tasman Drive
- Lower Silver Creek from Coyote Creek to Interstate 680 (Reaches 1-3)
- Wrigley Ford Creek

Major Capital Improvements Identified in the CIP

- Berryessa Creek from Calaveras Boulevard to Old Piedmont Road (Clean, Safe Creeks)
- Berryessa Creek from Lower Penitencia Creek to Calaveras Boulevard
- Coyote Creek Montague Expressway to Interstate 280 (Clean, Safe Creeks)
- Lower Silver Creek from Interstate 680 to Lake Cunningham (Reaches 4, 5, and 6)
- Upper Penitencia Creek from Coyote Creek to Dorel Drive (Safe, Clean Water)

Flood Protection Capital Improvements

Uvas/Llagas Watershed

Major Capital Improvements Completed

- Llagas Creek–Lower from Pajaro River to Buena Vista Road
- Uvas Creek

Major Capital Improvements Identified in the CIP

- Llagas Creek Capacity Restoration from Buena Vista Road to Pajaro River
- Llagas Creek–Upper, Buena Vista Road to Llagas Road (Clean, Safe Creeks/Safe, Clean Water)

Multiple Watersheds

Major Capital Improvements Identified in the CIP

- San Francisco Bay Shoreline (Safe, Clean Water)
- Watershed Asset Rehabilitation Program

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new flood protection projects proposed to be added to the Fiscal Year 2018-22 CIP reflect the Board's priorities. The priority criteria used are included in Appendix A.

A financial analysis of the Watershed and Steam Stewardship Fund and Safe, Clean Water Fund, the funding sources for flood protection capital improvements, was conducted to determine if there are limitations to funding all of the projects proposed for the Fiscal Year 2018-22 CIP. A potential funding shortfall at the end of the Safe, Clean Water Program has been identified. Staff is working to address this issue. Results of the prioritization process and financial analysis are summarized in Appendix B.

The watersheds have benefited from higher than projected property tax revenue in fiscal years 2013 through 2016. The District will also receive $55 million from DWR to assist with construction of Lower Silver, Lower Berryessa, Upper Berryessa, and Lower Penitencia.

The voter approved Safe, Clean Water program will provide funding for some of the highest priority unfunded projects including:

- Permanente Creek, San Francisco Bay to Foothill Expy.
- San Francisquito Creek, SF Bay to Middlefield Road
- Sunnyvale East & West Channels
- Upper Guadalupe River, I-280 to Blossom Hill Road
- Upper Penitencia Creek, Coyote to Dorel Drive
- Berryessa Creek, Calaveras Blvd. to Interstate 680
- Coyote Creek, Montague Expy. to Interstate 280
- Upper Llagas Creek, Buena Vista Rd. to Llagas Rd.
- San Francisco Bay Shoreline - Design and Partial Construction of EIA 11 and Planning for other EIAs

An implementation schedule for the Safe, Clean Water projects is available in Appendix E.

Delays in the federal funding for many of the USACE projects have extended the schedules beyond the dates committed by the District. Therefore, the District is evaluating the option of proceeding with the local funding option on several of these projects. Construction on a number of flood protection projects have been delayed due to either Federal funding issues or delays in receiving environmental permits.

The following high priority flood protection projects, unfunded or partially funded, are of major concern to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."

Partially Funded and Unfunded CIP Projects

- Coyote Creek, Montague Expressway to Interstate 280 (Construction is unfunded)
- San Francisco Bay Shoreline Project - except EIA 11 (Design and Construction is unfunded)
- San Francisquito Creek 100 year flood protection upstream of Highway 101
- Upper Berryessa Creek, Interstate 680 to Old Piedmont Road (unfunded; $20 million)
- Berryessa Creek, Lower Penitencia Creek to Calavers Blvd–Phase 3 and Tularcitos Creeks (construction is unfunded $50M)
- Upper Llagas, Reach 14

Flood Protection Capital Improvements

The following table is a project funding schedule for flood protection capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2016-17.

Flood Protection Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
	LOWER PENINSULA WATERSHED										
10394001	Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	-	234	458	-	-	-	-	-	1,658
10244001s	Permanente Creek, SF Bay to Foothill Expressway	62,569	12,105	178	16,906	1,028	-	-	-	-	92,608
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	44,882	536	575	7,338	5,224	997	-	-	-	58,977
	WEST VALEY WATERSHED										
20194005	San Tomas Creek, Quito Road Bridge Replacement	563	-	1	124	-	-	-	-	-	687
26074002	Sunnyvale East and West Channels	26,177	-	10,705	4,931	18,831	18,303	117	122	-	68,481
	GUADALUPE WATERSHED										
26154001s	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	112,881	8,615	21,446	6,544	22,503	18,736	8,222	3,529	3,021	184,051
	COYOTE WATERSHED										
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	45,403	14,747	5,812	-	-	-	-	-	-	60,150
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	82,417	27,176	7,468	-	20,014	2,441	2,447	426	-	134,921
26174043	Coyote Creek, Montague Expressway to Interstate 280	11,486	-	632	-	-	-	1,021	852	23,227	36,586
40264011	Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	-	-	-	10,734
40334005	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	6,800	2,801	1,781	4,815	12,252	562	292	304	215	28,041
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	96,788	2,471	348	1,981	589	320	-	-	-	102,149
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	17,899	-	4,213	-	10,536	6,134	15,232	8,650	8,412	66,863
	UVAS LLAGAS WATERSHED										
50284010	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,475	-	-	2,014	3,245	2,927	127	15,359
26174051s	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	104,552	2,353	42,342	1,146	25,905	24,281	12,892	426	443	171,998
	MULTIPLE WATERSHEDS										
00044026s	San Francisco Bay Shoreline (E7)	24,798	8,166	9,038	2,721	2,913	4,543	4,434	730	-	48,305
62084001	Watersheds Asset Rehabilitation Program	2,728	787	608	11,047	4,073	1,999	10,786	14,701	20,730	66,851
	TOTAL	652,647	83,586	108,390	59,685	124,517	80,454	58,688	32,667	56,175	1,148,419

The following table shows funding requirements from each funding source for flood protection capital improvements.

Flood Protection - Funding Sources ($K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
12	Watershed Stream Stewardship Fund	257,649	38,561	17,455	22,820	54,577	13,460	16,770	18,358	21,072	443,267
26	Safe, Clean Water and Natural Flood Protection Fund	394,998	45,025	90,935	36,865	69,940	66,994	41,918	14,309	35,103	705,152
	TOTAL	652,647	83,586	108,390	59,685	124,517	80,454	58,688	32,667	56,175	1,148,419

FY 2016-17 Funds to be reappropriated

This page intentionally left blank.

Project	**Palo Alto Flood Basin Tide Gate Structure Improvements**
Program	Flood Protection - Lower Peninsula Watershed
Priority No.	56
Project No.	10394001
District Contact	Ngoc Nguyen NNguyen@valleywater.org



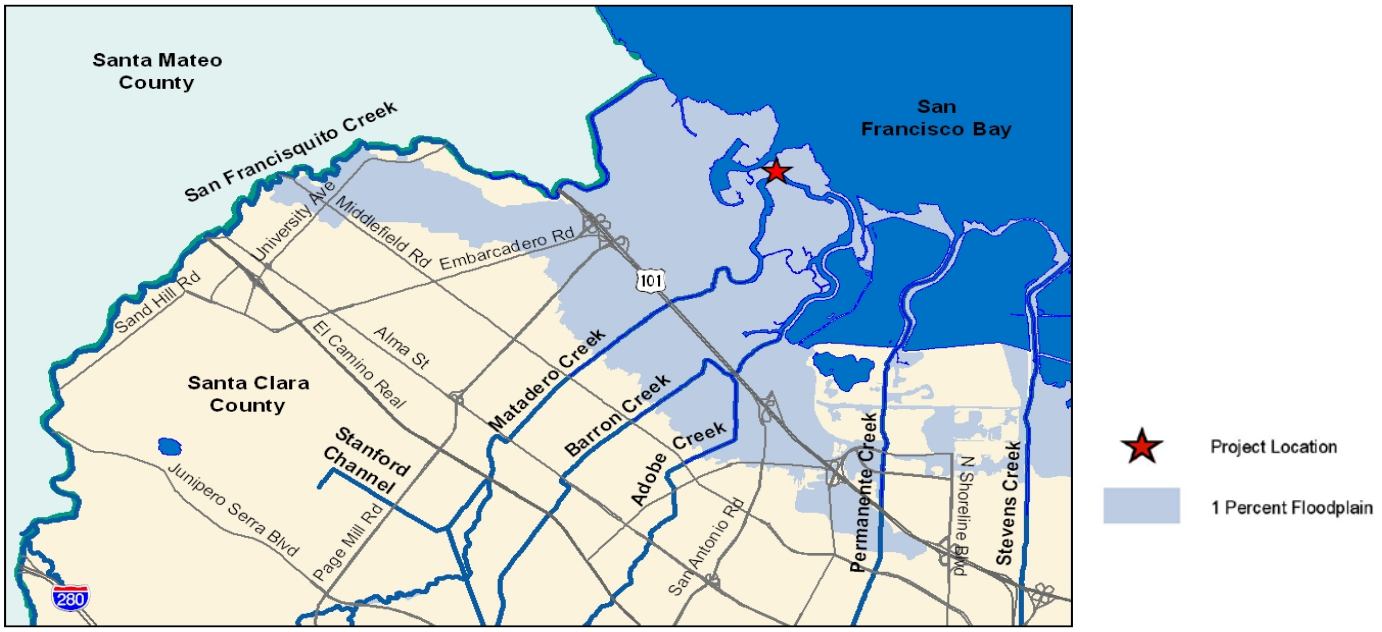
View from the west side of the Palo Alto tide gates facing east

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Palo Alto Flood Basin structure to accomplish the following objectives:

- Replace or repair the existing tide gate structure to improve the functionality of the flood barrier system.
- Reduce the possibility of flooding in lower reaches of Matadero, Adobe, and Barron Creeks.
- Prevent environmental impacts due to submergence of habitat areas within the Basin for Salt Marsh Harvest Mouse, California Clapper Rail bird and the Black Rail bird.
- Prevent impacts due to sea level rise or a 100-year fluvial flood.

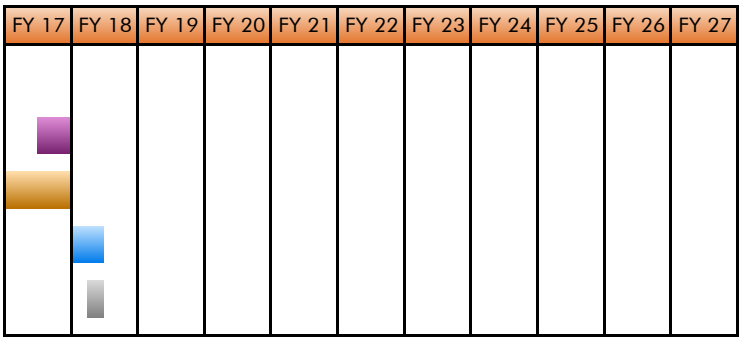
PROJECT LOCATION



SCHEDULE & STATUS

October 2014 to December 2018

Phase	Cost
Plan	251
Permits	150
Design	183
Construct	1,062
Closeout	10
	1,656



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	256	710	692	0	0	0	0	0	1,658
with inflation	256	710	692	0	0	0	0	0	1,658

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	0	234	458	0	0	0	0	0	1,658

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	1,658
Other Funding Sources	0
Total	1,658

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Permanente Creek, San Francisco Bay to Foothill Expressway**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	62
Project No.	10244001s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



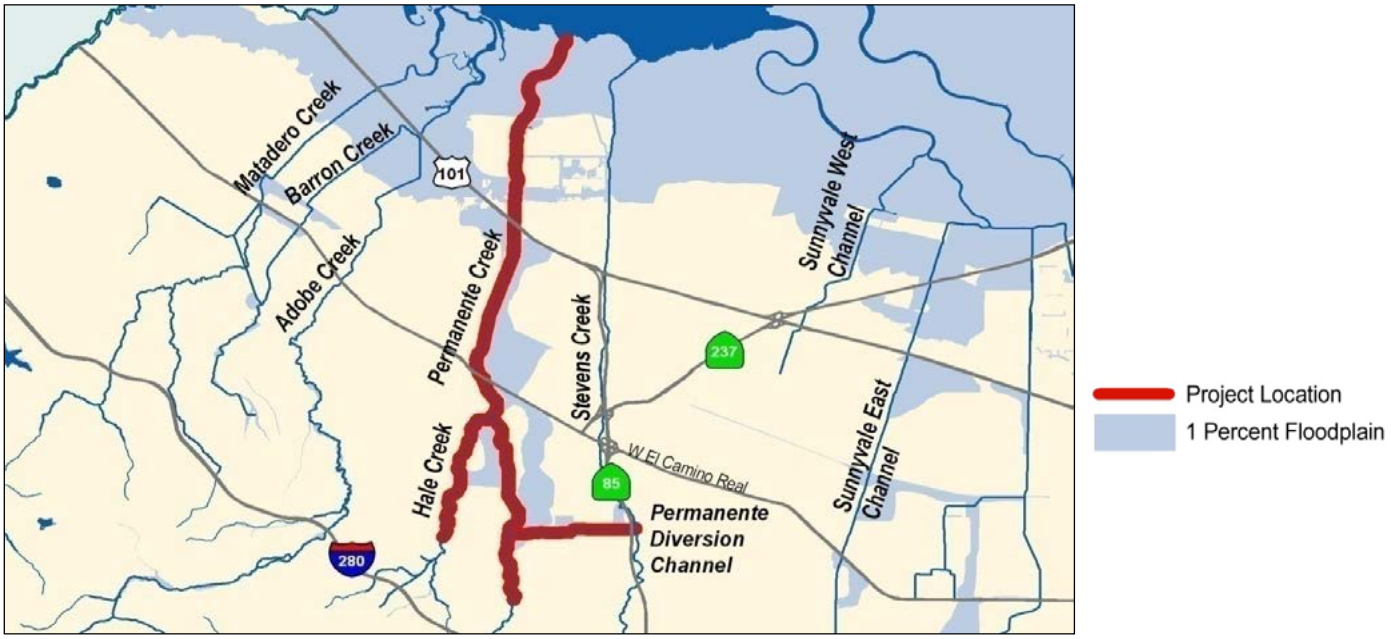
Permanente Creek, looking downstream at the golf course foot bridge

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, Hale Creek from Foothill Expressway to its confluence with Permanente Creek, and the diversion structure between Permanente and Stevens Creeks, to accomplish the following objectives:

- Provide flood protection to 1,664 parcels, including Middlefield Road and Central Expressway.
- Reduce erosion and sedimentation, reduce maintenance costs, and improve safety and stability of the failing channel on Permanente Creek from the San Francisco Bay to Foothill Expressway.
- Provide environmental restoration and enhancement benefits, where opportunities exist.
- Provide recreation enhancements, where opportunities exist.
- Provide natural flood protection by taking a multiple-objective approach.

PROJECT LOCATION

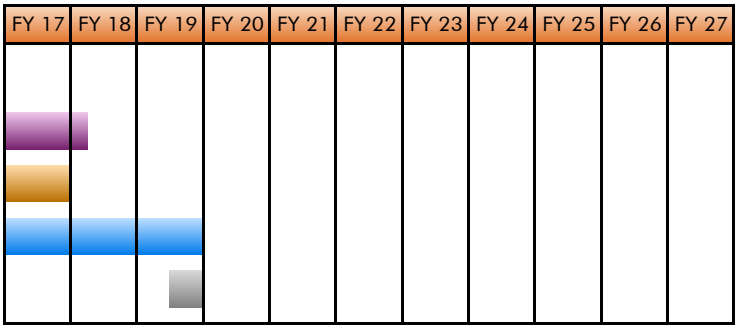


SCHEDULE & STATUS

July 2001 to June 2019

Construction includes multiple contract phases and three years of plant establishment monitoring.

Phase	Cost
Plan	10,048
Permits	3,712
Design	15,035
Construct	58,578
Closeout	50
	87,423



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,363	0	0	0	0	0	0	0	17,363
with inflation	17,363	0	0	0	0	0	0	0	17,363
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	16,833	40,300	16,906	950	0	0	0	0	74,989
with inflation	16,833	40,300	16,906	1,028	0	0	0	0	75,067
TOTAL	34,196	40,300	16,906	950	0	0	0	0	92,352
with inflation	34,196	40,300	16,906	1,028	0	0	0	0	92,430

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,541	0	178	0	0	0	0	0	0	17,541
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	45,028	12,105	0	16,906	1,028	0	0	0	0	75,067
TOTAL	**62,569**	**12,105**	**178**	**16,906**	**1,028**	**0**	**0**	**0**	**0**	**92,608**

Adjusted Budget includes adopted budget plus a planned budget adjustment for $383,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,541
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	75,067
Total	**92,608**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include sediment removal at three flood detention sites, and bypass channel inlet and outlet operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**San Francisquito Creek, San Francisco Bay through Searsville Dam**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	78
Project No.	10284007s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Upstream face of Pope/Chaucer Street with water surface approximately 2 feet below the soffit

PROJECT DESCRIPTION

This project provides coordination and support to the San Francisquito Joint Powers Authority, in partnership with the U.S. Army Corps of Engineers, to complete planning and design documents for an approved project alternative on San Francisquito Creek, from San Francisco Bay through Searsville Dam. This project will accomplish the following objectives:

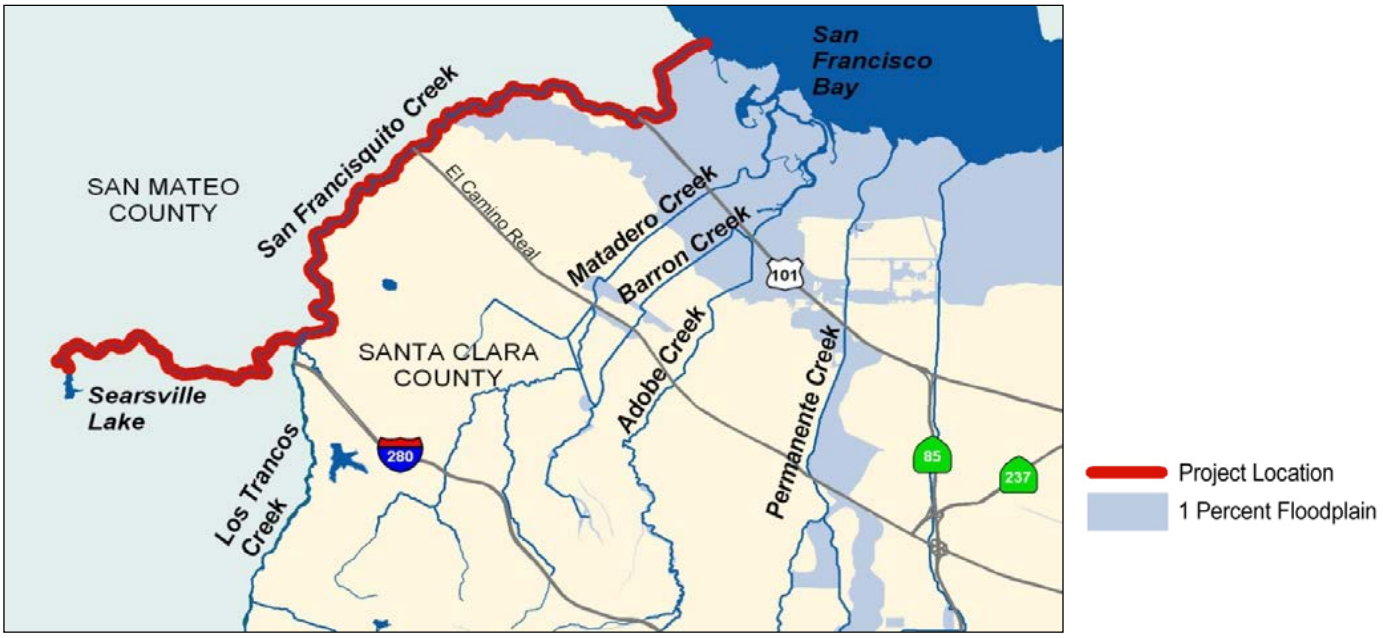
- Provide flood protection.
- Reduce bank erosion and sedimentation-related impacts along San Francisquito Creek.
- Avoid potential adverse impacts on fish and wildlife habitats.
- Minimize impacts to the creek's environmental resources and restore the riparian corridor where feasible.
- Develop public support for the preferred alternative.

The San Francisquito construction project will provide 100-year flood protection from San Francisco Bay to Highway 101 and replace two bridges between Highway 101 and Middlefield Road.

This project is accounted for in the following job numbers:

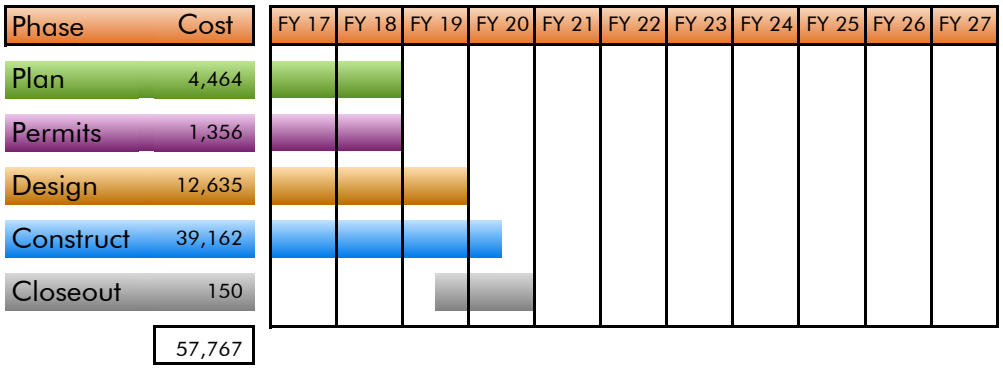
- 10284007 – SF Bay through Searsville Dam
- 10284008 – Early Implementation
- 26284001 – SF Bay through Searsville Dam
- 26284002 – Construction - San Francisco Bay to Middlefield Rd.

PROJECT LOCATION



SCHEDULE & STATUS

June 2003 to June 2020



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	4,064
with inflation	4,064	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	1,614
with inflation	1,614	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	5,775	550	426	0	0	0	0	0	6,751
with inflation	5,775	550	426	0	0	0	0	0	6,751
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	31,520	1,320	7,456	4,906	886	0	0	0	46,088
with inflation	31,520	1,320	7,456	5,224	997	0	0	0	46,516
TOTAL	**42,973**	**1,870**	**7,882**	**4,906**	**886**	**0**	**0**	**0**	**58,517**
with inflation	**42,973**	**1,870**	**7,882**	**5,224**	**997**	**0**	**0**	**0**	**58,945**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,782	0	457	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	32,422	536	118	7,338	5,224	997	0	0	0	46,516
TOTAL	**44,882**	**536**	**575**	**7,338**	**5,224**	**997**	**0**	**0**	**0**	**58,976**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $31,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	53,298
Total	**58,976**
San Francisquito Joint Powers Authority (DWR)	11,000
U.S. Army Corps of Engineers - In-kind Services	3,000
County of San Mateo - In-kind Services	1,500

County and Corps participation are for Feasibility Study activities only. Additional funding will be negotiated during subsequent phases.

OPERATING COST IMPACTS

No operating budget impacts are expected from the construction of this project.

USEFUL LIFE: Not Available

Project	**San Tomas Creek, Quito Road Bridges Replacement**
Program	Flood Protection - West Valley Watershed
Priority No.	63
Project No.	20194005
District Contact	Vincent Gin VGin@valleywater.org



San Tomas Aquino Creek, looking upstream at one of the Quito Road bridge crossings and an adjacent pedestrian footbridge.

PROJECT DESCRIPTION

This project partners with the City of Saratoga, the Town of Los Gatos, and Caltrans to plan, design, and construct two bridge replacements on San Tomas Aquino Creek at Quito Road, to provide one-percent flood protection.

PROJECT LOCATION

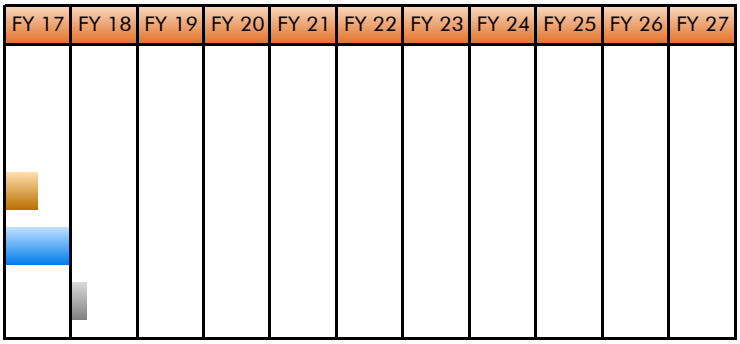


★ Project Location

SCHEDULE & STATUS

July 2001 to September 2017

Phase	Cost
Plan	-
Permits	-
Design	-
Construct	393
Closeout	24
	417



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	562	0	125	0	0	0	0	0	687
with inflation	562	0	125	0	0	0	0	0	687

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	563	0	1	124	0	0	0	0	0	687

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	687
Other Funding Sources	0
Total	**687**
City of Saratoga	300
Town of Los Gatos	300
Caltrans (Highway Bridge Replacement and Rehabilitation Program) - 80%	4,115

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease District operating costs as the facility is owned by the City of Saratoga.

USEFUL LIFE: 30+ Years

Project	**Sunnyvale East and West Channels Improvement**
Program	Flood Protection – West Valley Watershed
Priority No.	65
Project No.	26074002
District Contact	Ngoc Nguyen nnguyen@valleywater.org



Sunnyvale West Channel looking upstream from Java Drive

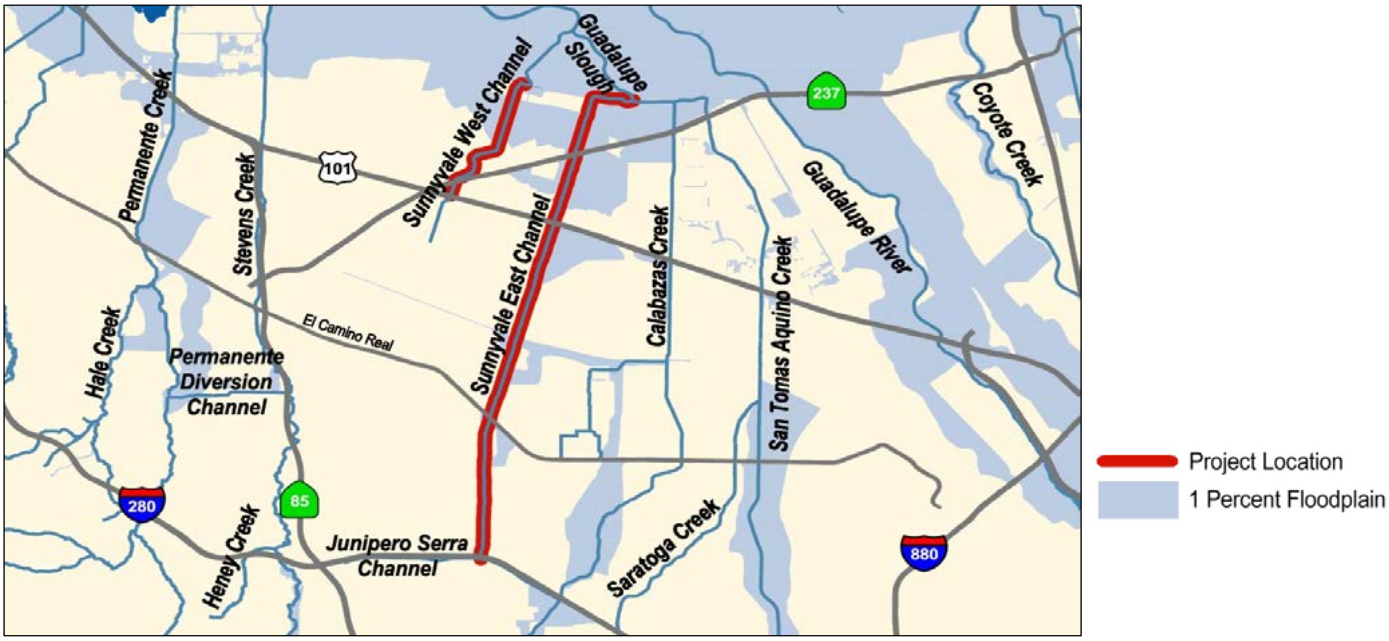
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to approximately 6.4 miles of the Sunnyvale East Channel, from Guadalupe Slough to Interstate 280, and 2.3 miles of the Sunnyvale West Channel, from Guadalupe Slough to Highway 101, to accomplish the following objectives:

- Provide flood protection to over 1,600 parcels along Sunnyvale East and West Channels.
- Provide environmental enhancement benefits where opportunities exist.
- Provide recreation enhancements where opportunities exist.
- Reduce erosion, sedimentation, and maintenance costs.
- Protect fish and wildlife habitat.

The Sunnyvale East and Sunnyvale West Channels were originally identified as separate projects. In order to improve efficiency by combining efforts, the planning, design and construction phases for both projects will be performed as a single effort.

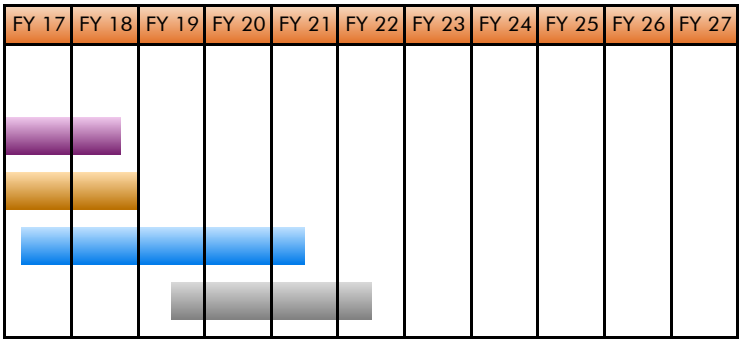
PROJECT LOCATION



SCHEDULE & STATUS

March 2006 to December 2021

Phase	Cost
Plan	5,765
Permits	1,258
Design	9,535
Construct	48,917
Closeout	200
	65,675



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26074002-Sunnyvale East and West Channels Improvement	14,622	850	15,636	17,750	16,750	100	100	0	65,808
with inflation	14,622	850	15,636	18,831	18,303	117	122	0	68,481

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26074002-Sunnyvale East and West Channels Improvement	26,177	0	10,705	4,931	18,831	18,303	117	122	0	68,481

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	68,481
Other Funding Source	0
Total	**68,481**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $50,000 per year, beginning in FY 2023. Increases in operations and maintenance costs include graffiti removal, mowing and weed control under the levees, and for operation and maintenance of the Pond A4 detention basin.

USEFUL LIFE: 30+ Years

Project	**Guadalupe River–Upper, Interstate 280 to Blossom Hill Road**
Program	Flood Protection – Guadalupe Watershed
Priority No.	68
Project No.	26154001s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Flooding from Guadalupe River on Willow Street near the Southern Pacific Railroad Bridge

PROJECT DESCRIPTION

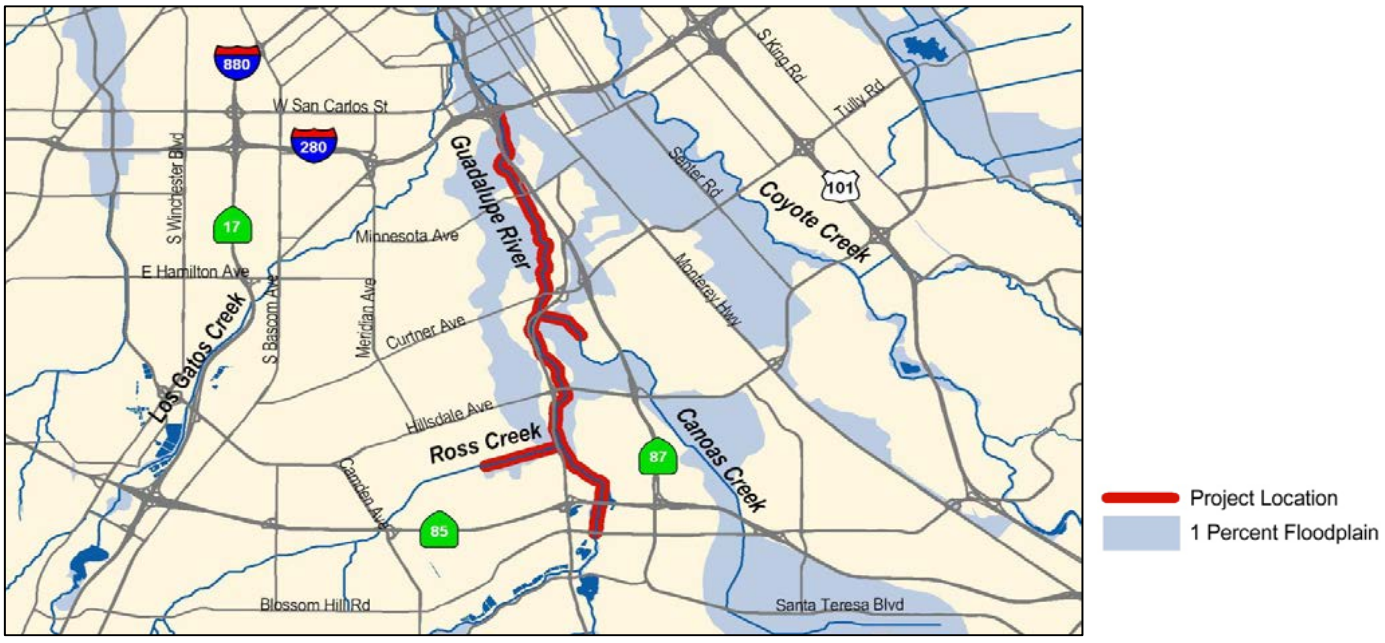
This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 6 miles of the Guadalupe River, from Interstate 280 to Blossom Hill Road, to accomplish the following objectives:

- Provide one-percent flood protection to nearly 7,000 parcels along the Guadalupe River, from I-280 to Blossom Hill Road, including portions of Ross Creek and Canoas Creek.
- Provide long-term net gains of 15 acres in riparian forest acreage, quality, and continuity of wildlife habitat, and conditions favoring Chinook salmon and steelhead trout.
- Provide access to an additional 19 miles of suitable upstream spawning and rearing habitat, which would result in significant long-term beneficial impacts on fisheries resources.
- Coordinate with the City of San Jose and the community to establish a continuous maintenance road suitable for trail development between Interstate 280 and Los Alamitos Creek.
- Improve water quality by reducing bank erosion and sedimentation-related impacts along the river and tributaries.
- Address and resolve permit coordination activities and watershed integration issues through the Guadalupe Watershed Integration Working Group.

This project is accounted for in the following job numbers:

- 26154001—Fish Passage Modification (Completed)
- 26154002—I-280 to Southern Pacific Railroad Bridge (Reach 6)
- 26154003—Southern Pacific Railroad Bridge to Blossom Hill Road (Reaches 7-12)

PROJECT LOCATION

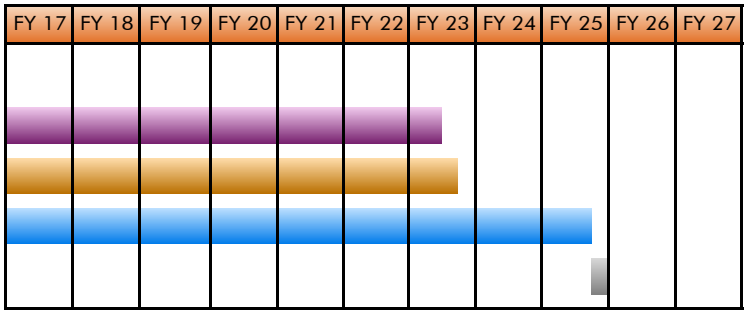


SCHEDULE & STATUS

July 2001 to June 2025

Planning phase is complete. Design and construction of eight individual reaches are being done sequentially.

Phase	Cost
Plan	9,004
Permits	2,540
Design	86,746
Construct	80,055
Closeout	167
	n/a



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	2,651
with inflation	2,651	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	32,448	425	926	800	1,300	1,270	0	30	37,199
with inflation	32,448	425	926	851	1,462	1,439	0	38	37,589
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	39,785	16,854	26,244	21,035	15,585	5,855	2,995	2,470	130,823
with inflation	39,785	16,854	26,244	22,472	17,274	6,783	3,529	2,983	135,924
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	7,887
with inflation	7,887	0	0	0	0	0	0	0	7,887
TOTAL	**82,771**	**17,279**	**27,170**	**21,835**	**16,885**	**7,125**	**2,995**	**2,500**	**178,560**
with inflation	**82,771**	**17,279**	**27,170**	**23,323**	**18,736**	**8,222**	**3,529**	**3,021**	**184,051**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	34,503	116	1,746	0	31	1,462	1,439	0	38	37,589
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	67,840	8,499	19,700	6,544	22,472	17,274	6,783	3,529	2,983	135,924
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	**112,881**	**8,615**	**21,446**	**6,544**	**22,503**	**18,736**	**8,222**	**3,529**	**3,021**	**184,051**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	124,052
SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood Protection Fund	22,614
State of California	21,600
City of San Jose	3,785
Total	**184,051**
U.S. Army Corps of Engineers - In-kind Services	188,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $480,000 per year, beginning in FY 2025, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and operations and maintenance in accordance with the Corps Operations and Maintenance Manual.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Calaveras Boulevard to Interstate 680**
Program	Flood Protection – Coyote Watershed
Priority No.	76
Project No.	26174041s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



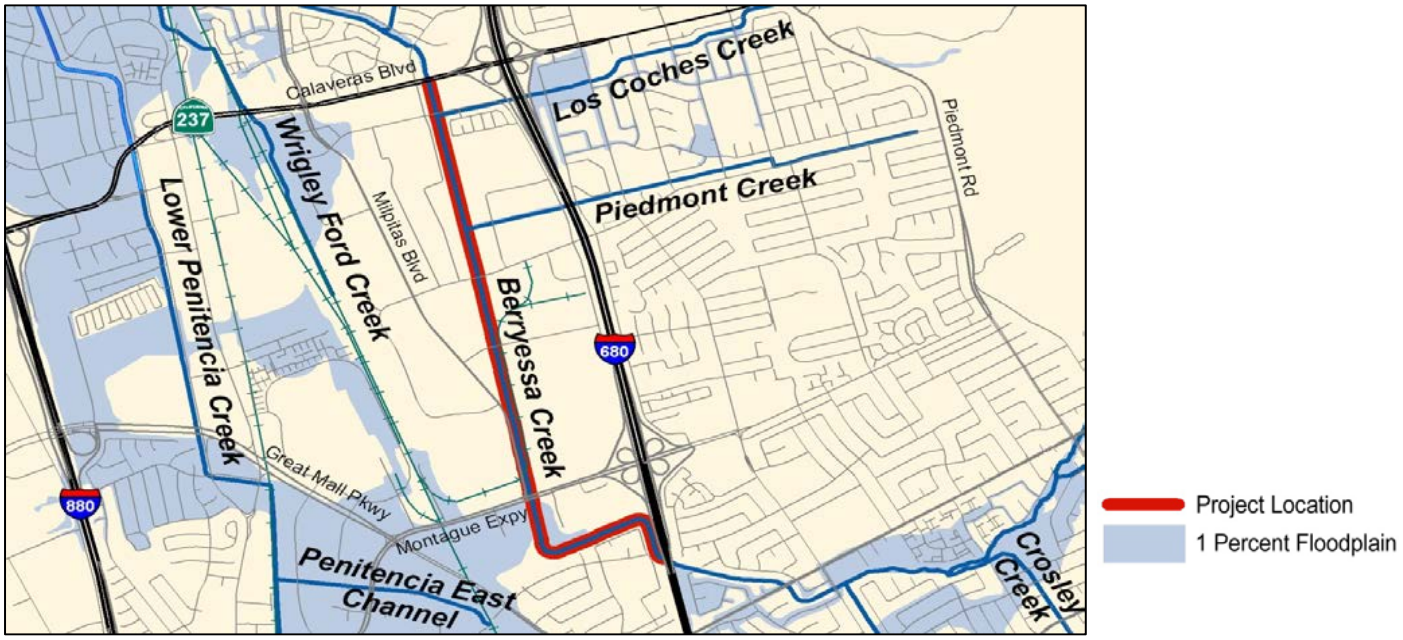
Berryessa Creek near flood stage at Piedmont Road in San Jose

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 2 miles of Berryessa Creek, from Calaveras Boulevard to Interstate 680, to accomplish the following objectives:

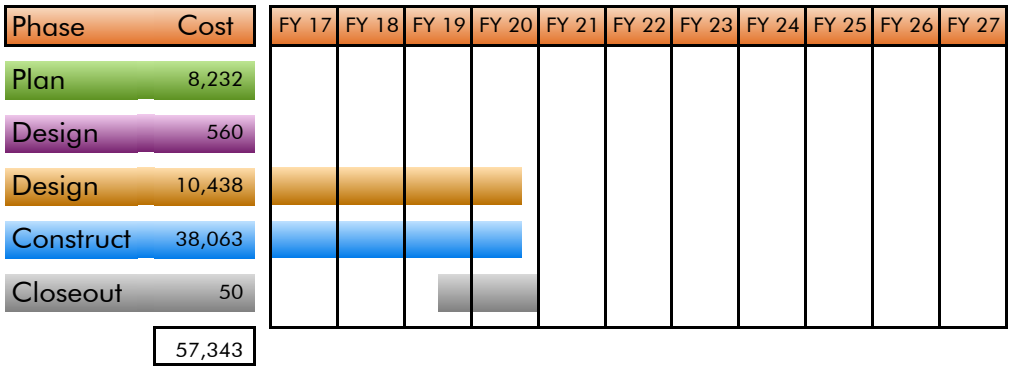
- Provide one-percent flood protection to more than 1,100 homes, businesses, and public buildings.
- Reduce sedimentation and maintenance requirements.
- Mitigate for project impacts.
- Improve stream habitat values.
- Coordinate with the cities of San Jose and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection Program Objectives.

PROJECT LOCATION



SCHEDULE & STATUS

January 2000 to June 2020



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26174041-Berryessa Creek, Corps Coordination	22,016	12,997	2,832	200	200	0	0	0	38,245
with inflation	22,016	12,997	2,832	215	225	0	0	0	38,285
26174042-Berryessa Creek, LERRDs	19,325	0	0	0	0	0	0	0	19,325
with inflation	19,325	0	0	0	0	0	0	0	19,325
TOTAL	**41,341**	**12,997**	**2,832**	**200**	**200**	**0**	**0**	**0**	**57,570**
with inflation	**41,341**	**12,997**	**2,832**	**215**	**225**	**0**	**0**	**0**	**57,610**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26174041-Berryessa Creek, Corps Coordination	24,729	14,747	4,463	0	0	0	0	0	0	39,476
26174042-Berryessa Creek, LERRDs	20,674	0	1,349	0	0	0	0	0	0	20,674
TOTAL	**45,403**	**14,747**	**5,812**	**0**	**0**	**0**	**0**	**0**	**0**	**60,150**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $2,540,000. Excess funds will be returned to Fund Reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	24,550
State of California	25,600
Department of Water Resources (Prop 1E)	10,000
Total	**60,150**
U.S. Army Corps of Engineers - In-kind Services	13,600

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $80,000 per year, beginning in FY 2021, to maintain approximately 2 miles of new levees and flood walls, and for activities such as vegetation spraying and graffiti removal.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard**
Program	Flood Protection – Coyote Watershed
Priority No.	68
Project No.	40174004s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



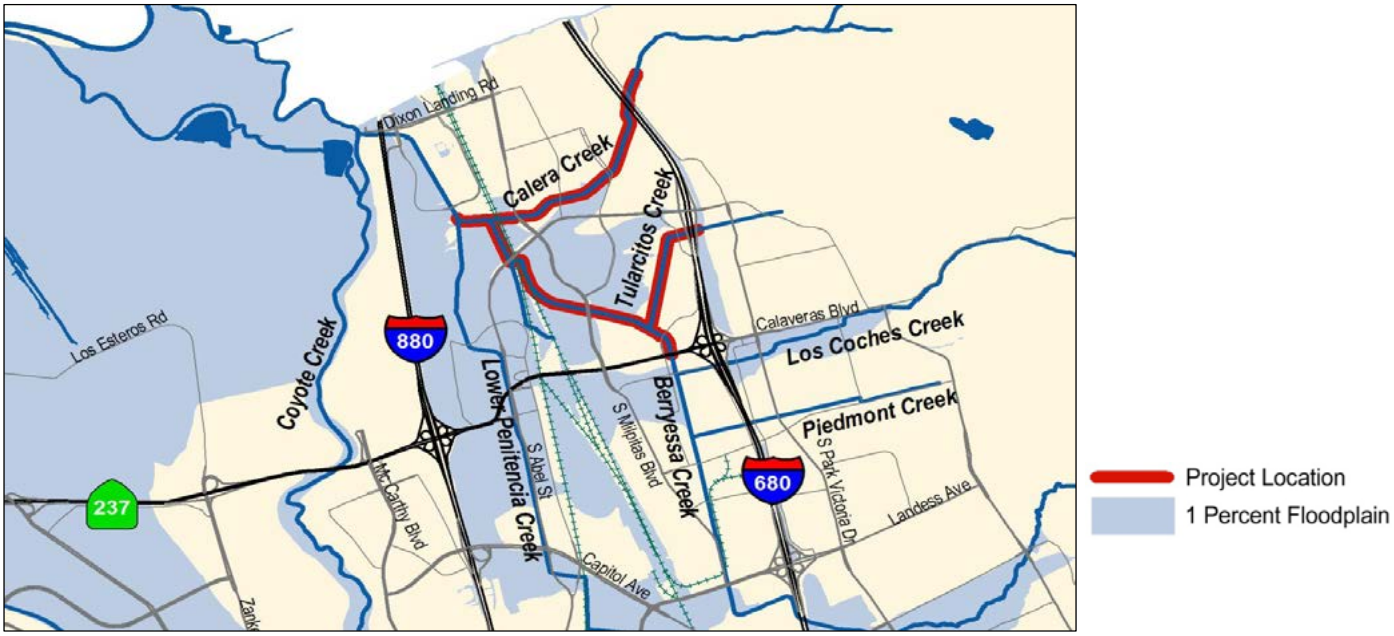
Berryessa Creek upstream of the confluence with Lower Penitencia Creek

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 3 miles of Berryessa Creek and its tributaries, from the confluence with Lower Penitencia Creek to Calaveras Boulevard (Phase 1 and 2) and both Calera and Tularcitos Creeks (Phase 3), to accomplish the following objectives:

- Provide one-percent flood protection to 1,823 homes, businesses, and public buildings in the surrounding area.
- Improve the structural integrity of the levees.
- Improve maintenance access and safety for District staff.
- Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.

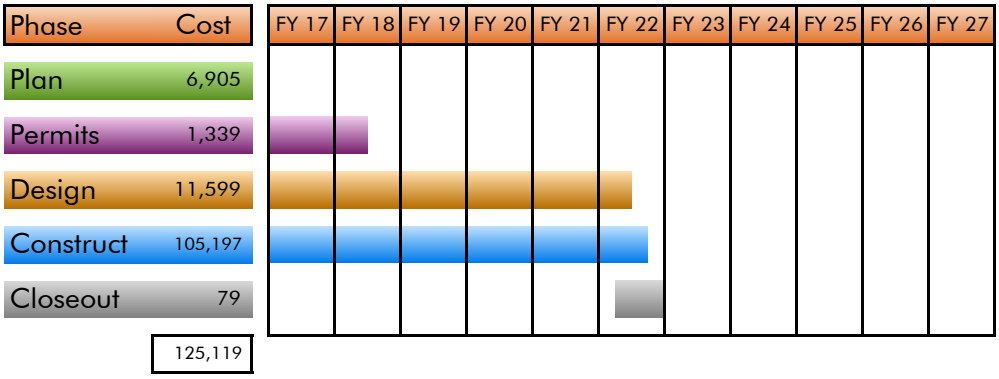
PROJECT LOCATION



SCHEDULE & STATUS

March 2001 to June 2023

Planning phase is complete. Construction includes three phases and three years of plant establishment monitoring.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	48,322	705	31	20	15	0	0	0	49,093
with inflation	48,322	705	31	22	17	0	0	0	49,097
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	29,223	23,875	3,825	18,234	320	320	350	0	76,147
with inflation	29,223	23,875	3,825	19,411	360	374	426	0	77,495
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	1,925	1,850	1,810	0	0	5,585
with inflation	0	0	0	2,082	2,081	2,073	0	0	6,236
TOTAL	**77,545**	**24,580**	**3,856**	**20,179**	**2,185**	**2,130**	**350**	**0**	**130,825**
with inflation	**77,545**	**24,580**	**3,856**	**21,515**	**2,458**	**2,447**	**426**	**0**	**132,827**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	51,191	0	2,164	0	0	0	0	0	0	51,191
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	31,226	27,176	5,304	0	17,932	360	374	426	0	77,495
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	0	2,082	2,081	2,073	0	0	6,236
TOTAL	**82,417**	**27,176**	**7,468**	**0**	**20,014**	**2,441**	**2,447**	**426**	**0**	**134,922**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $2,094,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	119,922
Department of Water Resources (Prop 1E)	15,000
Total	**134,922**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately $70,000 per year. Operating costs will increase with completion of construction of each of 3 phases: beginning with a $35,000 increase in FY 2018 (1 year after completion of Phase 1), increasing to $45,000 in FY 2023 (1 year after completion of Phase 2), and finally increasing to $70,000 in FY 2022 (1 year after completion of Phase 3). These costs will be for increased maintenance activities such as sediment removal, vegetation management, levee maintenance, graffiti abatement, and trash & debris cleanup.

USEFUL LIFE: 30+ Years

Project	**Coyote Creek, Montague Expressway to Interstate 280**
Program	Flood Protection – Coyote Watershed
Priority No.	62
Project No.	26174043
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Flooding from Coyote Creek on 17th Street near downtown San Jose in January 1997

PROJECT DESCRIPTION

This project plans, designs, and partially constructs improvements along approximately 6.1 miles of Coyote Creek, from Montague Expressway to Interstate 280, to accomplish the following objectives:

- Complete planning and design for flood protection of 1,400 businesses and homes from a one percent flood for Coyote Creek from Montague Expwy to I-280.
- Improve water quality, enhance stream habitat, and provide recreational opportunities.
- Incorporate revegetation and aesthetic elements of the Coyote Creek park chain.
- Minimize long term maintenance needs.

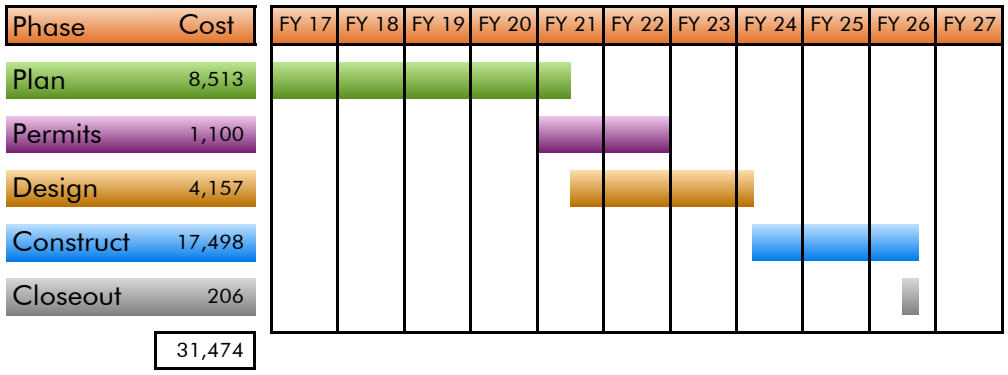
PROJECT LOCATION



SCHEDULE & STATUS

September 2002 to March 2026

Project is on hold and will resume in 2019.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	10,854	0	0	180	360	900	700	18,480	31,474
with inflation	10,854	0	0	195	405	1,053	852	23,227	36,585

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	11,486	0	632	0	0	0	1,021	852	23,227	36,585

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	36,585
Other Funding Source	0
Total	**36,585**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2027. Currently the District has limited and sporadic property rights within the project limits along the creek, and ongoing maintenance costs are relatively small. Project implementation may include acquisition of continuous right of way for construction and future operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**Cunningham Flood Detention Certification**
Program	Flood Protection – Coyote Watershed
Priority No.	83
Project No.	40264011
District Contact	Ngoc Nguyen NNguyen@valleywater.org



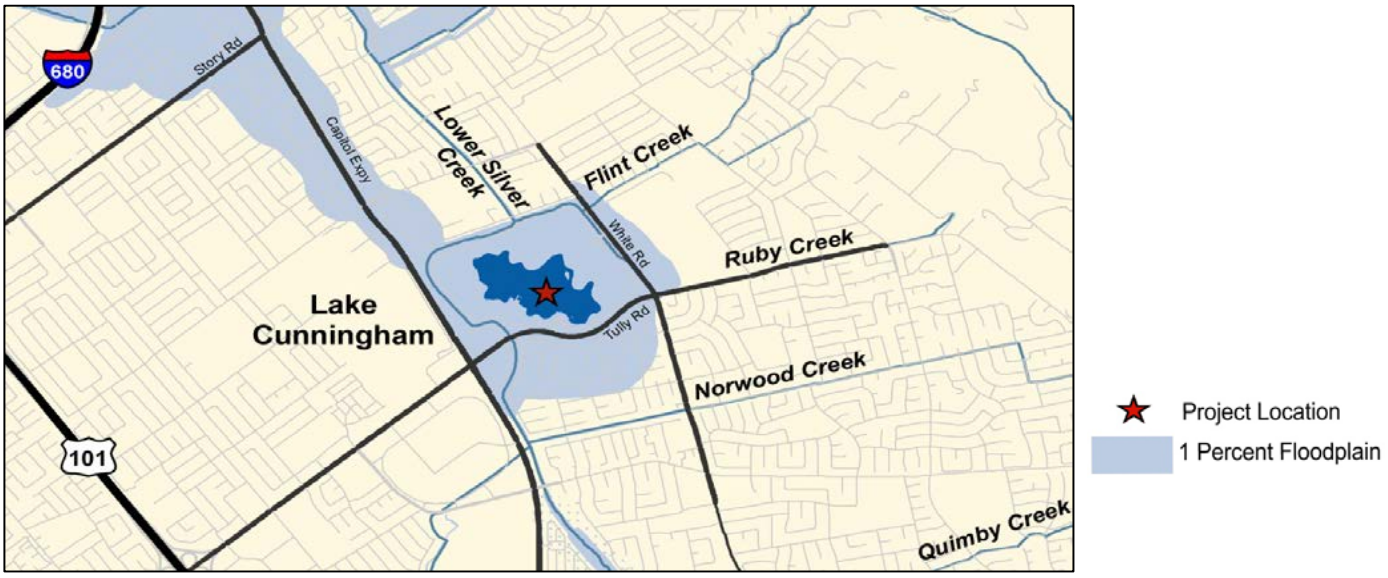
Flooding from Lower Silver Creek in February 1969 at the future site of Lake Cunningham Regional Park

PROJECT DESCRIPTION

This project plans, designs, and constructs final improvements at Lake Cunningham Regional Park (Park) to ensure the site operates as a flood detention facility in accordance with the 1978 agreement with the City of San Jose (City) and to ensure the Lower Silver Creek Project (LSC Project) improvements downstream of Cunningham Avenue function as designed. This project will accomplish the following objectives:

- Validate that the flood detention facility can attenuate the volume of water associated with 2,249 cfs below the park land elevation as stipulated in the 1978 Joint Use Agreement between the City and the District.
- Obtain Federal Emergency Management Agency (FEMA) certification of theflood detention facility and Lower Silver Creek improvements north of the Park to revise the applicable flood insurance rate maps in the Lower Silver Creek 1-percent floodplain near the north of the Park.
- Update the 1978 Joint Use Agreement between the City and the District to meet the flood detention facility's validated condition.

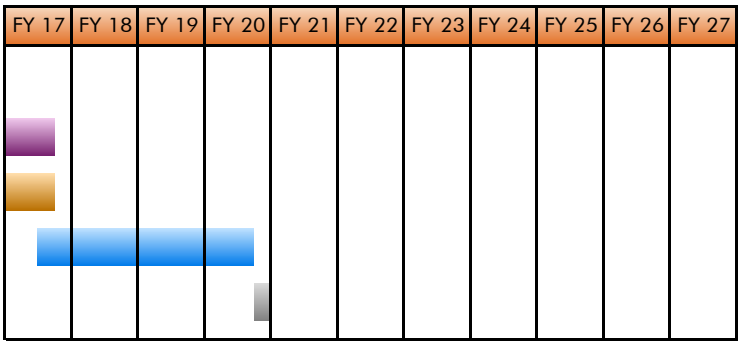
PROJECT LOCATION



SCHEDULE & STATUS

August 1999 to June 2020

Phase	Cost
Plan	2,231
Permits	96
Design	1,986
Construct	6,331
Closeout	10
	10,654



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40264011-Cunningham Flood Detention Certification	2,741	5,012	2,208	600	110	0	0	0	10,671
with inflation	2,741	5,012	2,208	649	124	0	0	0	10,734

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40264011-Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	0	0	0	10,734

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	10,734
Other Funding Source	0
Total	**10,734**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operations costs. The project is within District jurisdiction and it is designed to minimize maintenance activities such as sediment removal, so as to have minimal or no additional impact to the operating budget.

USEFUL LIFE: 30+ Years

Project	**Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks**
Program	Flood Protection – Coyote Watershed
Priority No.	65
Project No.	40334005
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Lower Penitencia Creek, looking downstream from Milmont Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 1 mile of Lower Penitencia Creek from the downstream confluence with Coyote Creek to the downstream face of San Andreas Drive, to accomplish the following objectives:

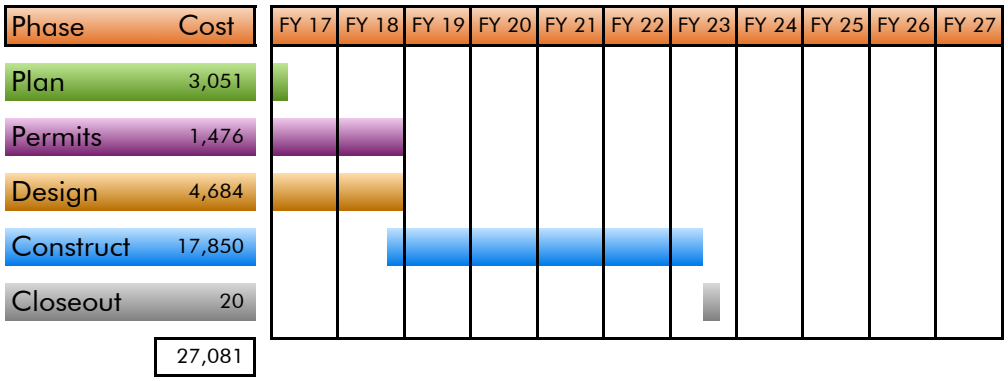
- Convey the Lower Berryessa Creek 1-percent design flow.
- Meet required water surface elevations at Coyote Creek and Berryessa Creek confluences.
- Minimize the need for seasonal removal of sediment and non-woody vegetation.
- Maintain existing FEMA accreditation along the east levee located between California Circle and Berryessa Cr
- Enable FEMA certification of the improvements.

PROJECT LOCATION



SCHEDULE & STATUS

October 2010 to January 2025



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	5,820	2,000	6,596	11,500	500	250	250	170	27,086
with inflation	5,820	2,000	6,596	12,252	562	292	304	215	28,042

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	6,800	2,801	1,781	4,815	12,252	562	292	304	215	28,042

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	23,042
Department of Water Resources (Prop 1E)	5,000
Total	**28,042**

OPERATING COST IMPACTS

Operating cost impacts will be established during the design phase.

USEFUL LIFE: 50 Years

Project	**Lower Silver Creek, I-680 to Cunningham Avenue (R4-6)**
Program	Flood Protection – Coyote Watershed
Priority No.	98
Project No.	40264007s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Lower Silver Creek looking upstream from Capital Expressway

PROJECT DESCRIPTION

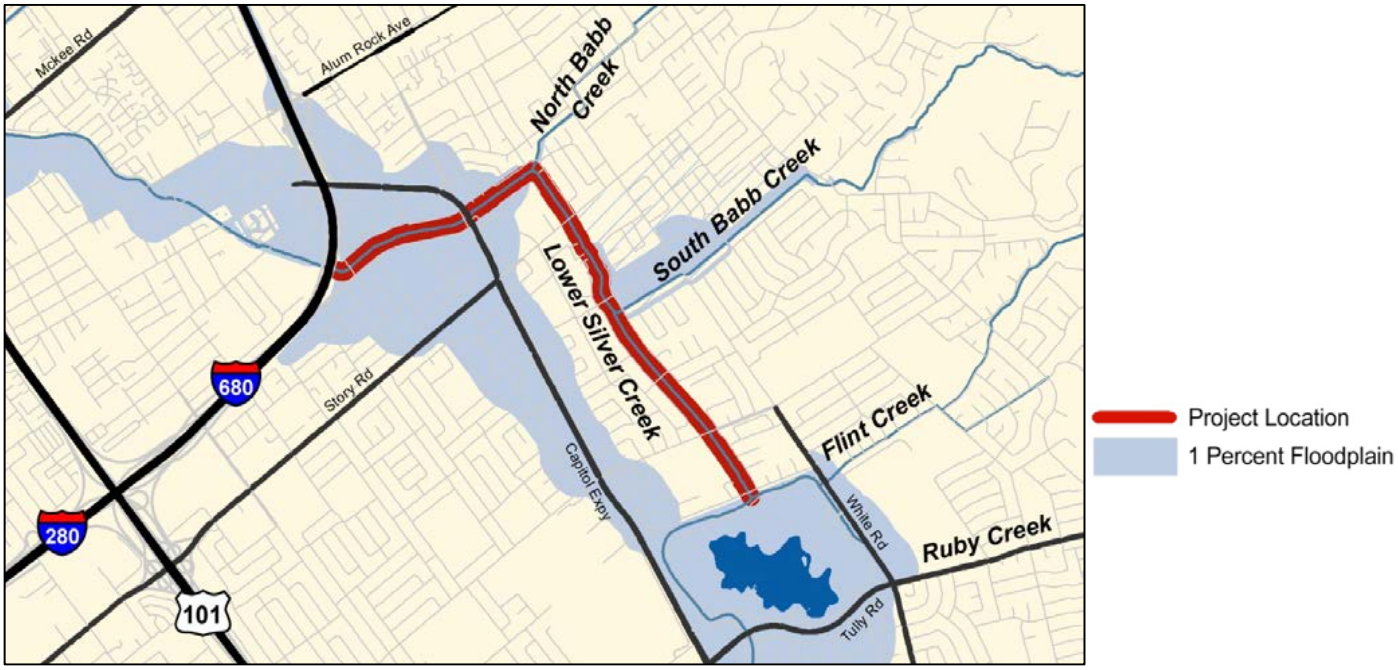
This project is part of a flood control project that partners with the Natural Resource Conservation Service (NRCS) to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement from the state and federal governments to accomplish the following objectives:

- Increase flood protection to 3,800 parcels in the surrounding area.
- Allow for on-site mitigation of project impacts, and in some cases enhancement of existing habitat values by increased wetlands and riparian habitat.
- Improve vehicle and pedestrian bridges crossing Lower Silver Creek.
- Develop the footprint for a future trail project between Capitol Avenue-Frontage Road and Jackson Avenue that ensures pedestrians and bicyclists may travel beneath the Dobern Pedestrian Bridge.

This project is accounted for in the following job numbers:

- 40264007–Lower Silver Creek, I-680 to N. Babb Rd. (Reach 4 Planning) - Completed
- 40264008–Lower Silver Creek, I-680 to Cunningham Rd. (Reaches 4-6)
- 40264012–Lower Silver Creek (Reaches 4-6) Reimbursable

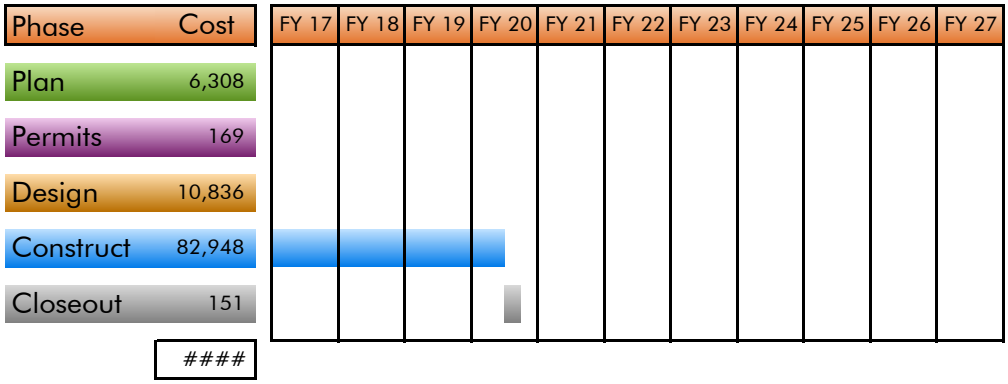
PROJECT LOCATION



SCHEDULE & STATUS

August 1991 to March 2020

Planning and Design phases are complete



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	2,371
with inflation	2,371	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	90,892	3,084	1,981	545	285	0	0	0	96,787
with inflation	90,892	3,084	1,981	589	320	0	0	0	96,867
40264012-Lower Silver Creek, LERRDs (R4-6)	1,815	749	50	50	40	0	0	0	2,704
with inflation	1,815	749	52	54	45	0	0	0	2,715
TOTAL	95,078	3,833	2,031	595	325	0	0	0	101,862
with inflation	95,078	3,833	2,033	643	365	0	0	0	101,953

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	91,505	2,471	0	1,981	589	320	0	0	0	96,867
40264012-Lower Silver Creek, LERRDs (R4-6)	2,912	0	348	0	0	0	0	0	0	2,912
TOTAL	96,788	2,471	348	1,981	589	320	0	0	0	102,150

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved budget exceeds planned expenditures by approximately $197,000. Excess funds will be returned to fund reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	49,087
State of California	8,387
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	**102,150**

OPERATING COST IMPACTS

Operating budget impacts from construction of this project are expected to be insignificant. Repair of several erosion sites will reduce maintenance needs, but will not affect overall sediment removal or vegetation control practices.

USEFUL LIFE: 50+ Years

Project	**Upper Penitencia Creek, Coyote Creek to Dorel Drive**
Program	Flood Protection – Coyote Watershed
Priority No.	66
Project No.	40324003s
District Contact	Vincent Gin VGin@valleywater.org



Flooding at King Road on Upper Penitencia Creek

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the following objectives.

- Provide one-percent flood protection to more than 5,000 homes, businesses, and public buildings.
- Mitigate for project impacts.
- Improve stream habitat values and fisheries potential.
- Reduce sedimentation and maintenance requirements.
- Identify opportunities to integrate recreation improvements consistent with the City of San Jose's Master Plans for Penitencia Creek Park Chain Reach 1 and Reach 2, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.
- Coordinate with local agencies to ensure that planned flood control improvements do not conflict with trail construction by the City of San Jose that is scheduled to begin in the latter part of 2013.

This project is accounted for in the following job numbers:

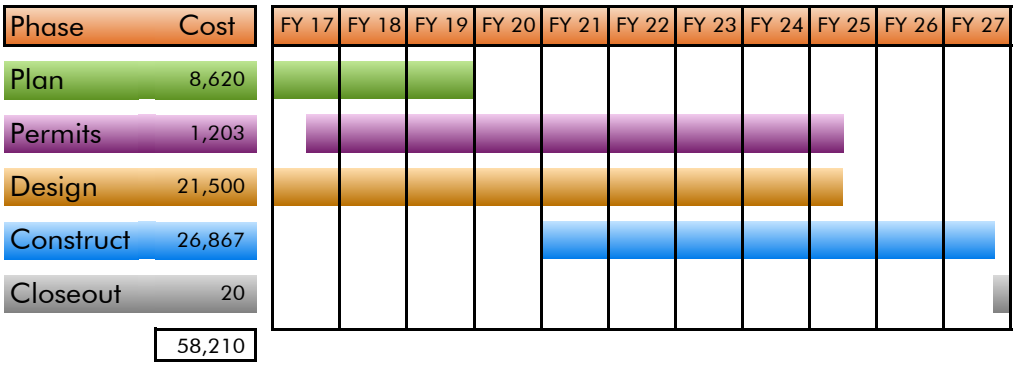
- 40324003—District coordination with Corps for Corps' work
- 40324005—District's Lands, Easements, Rights of Way, Relocation, and Disposal (LERRDs)
- 26324001—Safe Clean Water Program coordination with Corps for Corps' work

PROJECT LOCATION



SCHEDULE & STATUS

March 1996 to June 2027



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,851	0	0	0	0	0	0	0	8,851
with inflation	8,851	0	0	0	0	0	0	0	8,851
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	3,474	1,361	671	0	0	0	0	0	5,506
with inflation	3,474	1,361	671	0	0	0	0	0	5,506
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	0	0	0	10,097	5,453	11,736	8,588	7,990	43,864
with inflation	0	0	0	10,921	6,134	15,232	8,650	8,412	49,349
TOTAL	**12,325**	**1,361**	**671**	**10,097**	**5,453**	**11,736**	**8,588**	**7,990**	**58,221**
with inflation	**12,325**	**1,361**	**671**	**10,921**	**6,134**	**15,232**	**8,650**	**8,412**	**63,706**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,970	0	119	0	0	0	0	0	0	8,970
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	8,544	0	3,709	0	0	0	0	0	0	8,544
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	385	0	385	0	10,536	6,134	15,232	8,650	8,412	49,349
TOTAL	**17,899**	**0**	**4,213**	**0**	**10,536**	**6,134**	**15,232**	**8,650**	**8,412**	**66,863**

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved Funding exceeds planned expenditures by approximately $3,157,000. Excess funding will be returned to reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,514
SCVWD Safe, Clean Water Fund	49,349
Total	**66,863**
U.S. Army Corps of Engineers - In-kind Services	102,720

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not Available

Project	**Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	65
Project No.	50284010
District Contact	Katherine Oven KOven@valleywater.org



Lower Llagas Creek near Pajaro River

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on approximately 7.15 miles of Lower Llagas Creek, from Buena Vista Avenue to Pajaro River, to accomplish the following objectives:

- Evaluate the current flood risk in the area surrounding the project versus the design level flood risk.
- Develop options to provide flood protection for Lower Llagas Creek Reaches 2 and 3 in accordance with Federal Emergency Management Agency (FEMA) criteria where applicable.
- Identify feasible opportunities for environmental restoration and corridor preservation.

PROJECT LOCATION

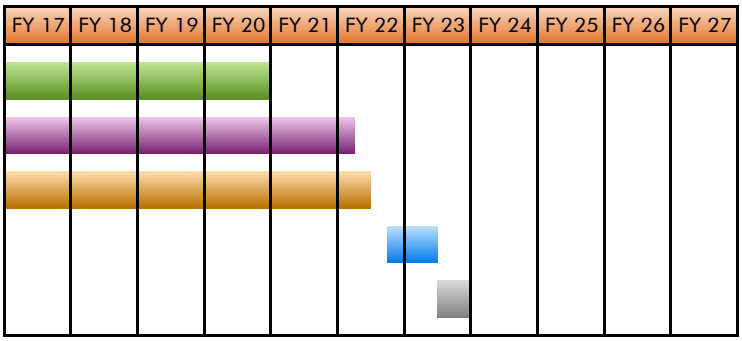


SCHEDULE & STATUS

July 2008 to June 2023

Project is "On Hold" until the Post-Project Hydraulic Analysis for the Upper Lllags Creek project is completed to address the City of Gilroy's request.

Phase	Cost
Plan	2,913
Permits	2,202
Design	3,858
Construct	5,000
Closeout	100
	14,073



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,313	1,258	52	1,450	2,550	2,850	2,500	100	14,073
with inflation	3,313	1,258	52	1,568	2,868	3,245	2,927	127	15,359

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	7,046	0	2,475	0	0	2,014	3,245	2,927	127	15,359

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	10,239
State of California	5,120
Total	**15,359**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 30+ Years

Project	**Llagas Creek–Upper, Buena Vista Avenue to Llagas Road**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	70
Project No.	26174051s
District Contact	Katherine Oven KOven@valleywater.org



Llagas Creek floods at Watsonville Road and the surrounding area

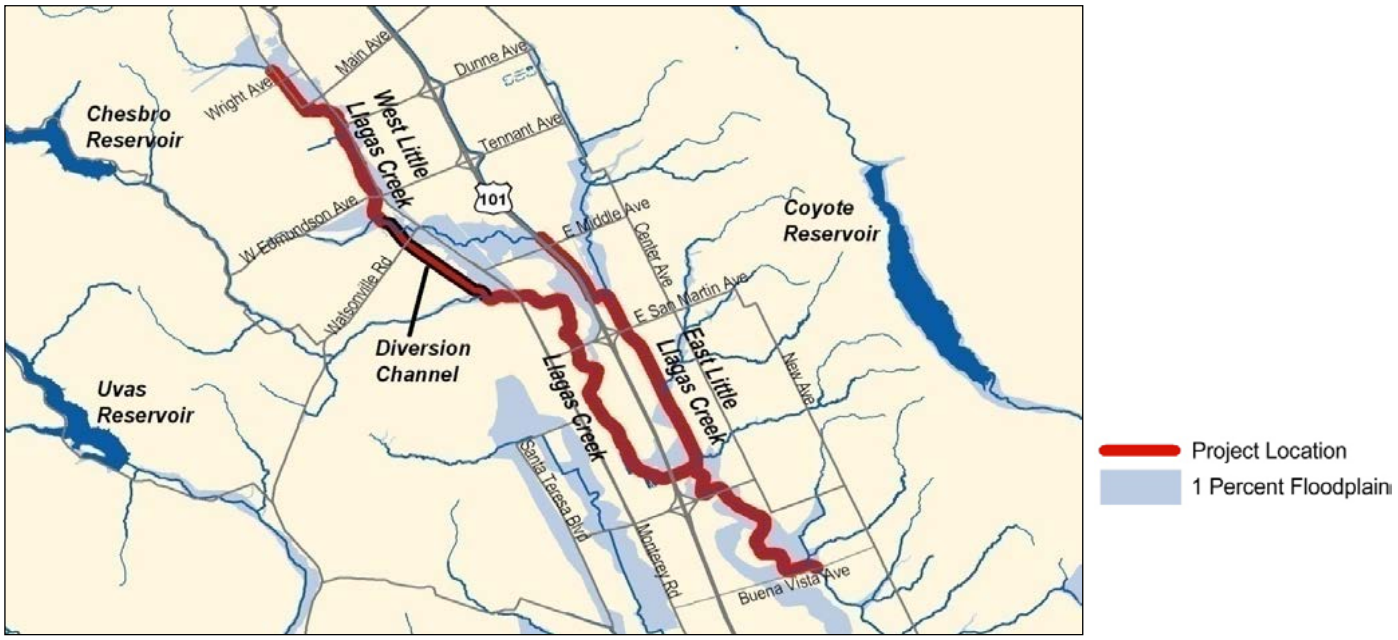
PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements on approximately 13.6 miles of Upper Llagas Creek, from Buena Vista Avenue to Llagas Road, to provide an increased level of flood protection with adequate freeboard. SCVWD shall coordinate with the County of Santa Clara and the City of Morgan Hill on public access and recreational trail opportunities within Reaches 7 and 8 of this project.

This project is accounted for in the following job numbers:

- 26174051 - Reaches 4-8 & 14 - Reimbursable - Lands, Easements, Rights of Way, Relocation, & Disposal (LERRDs)
- 26174052 - Reaches 4-8 & 14 - Coordination with the Corps
- 26174053 - Technical Studies (completed)
- 26174054 - Design
- 50C40335 - Construction, Reach 5, 6, & 7b

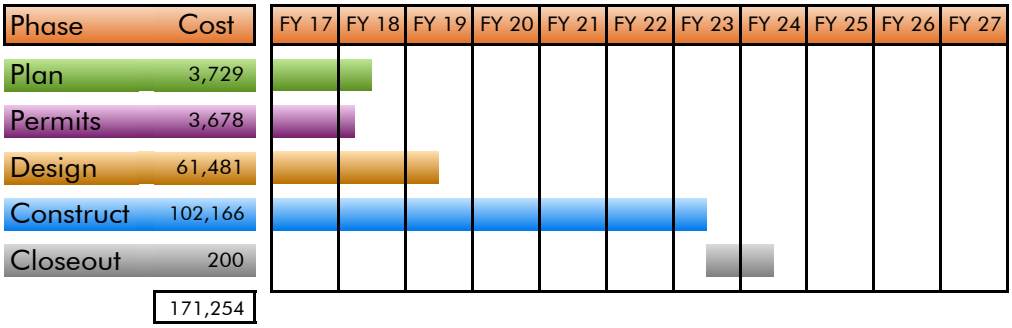
PROJECT LOCATION



SCHEDULE & STATUS

August 2000 to December 2023

Project schedule may vary considerably and is dependent upon the Corps and Congress.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26174051-Llagas Ck—Upper, LERRDs	20,793	10,200	12,064	0	0	0	0	0	43,057
with inflation	20,793	10,200	12,064	0	0	0	0	0	43,057
26174052-Llagas Ck—Upper, Corps Coordination	2,491	8,018	20,019	19,000	18,000	12,600	100	100	80,328
with inflation	2,491	8,018	20,019	19,000	18,000	12,600	122	127	80,377
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
with inflation	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	19,672	1,943	1,040	250	250	250	250	250	23,905
with inflation	19,672	1,943	1,040	270	281	292	304	316	24,120
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	17,000	6,000	0	0	0	23,000
with inflation	0	0	0	17,000	6,000	0	0	0	23,001
TOTAL	**44,402**	**20,161**	**33,123**	**36,250**	**24,250**	**12,850**	**350**	**350**	**171,736**
with inflation	**44,402**	**20,161**	**33,123**	**36,271**	**24,282**	**12,893**	**426**	**443**	**172,000**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26174051-Llagas Ck—Upper, LERRDs	42,632	319	11,958	106	0	0	0	0	0	43,057
26174052-Llagas Ck—Upper, Corps Coordination	40,893	0	30,384	0	8,635	18,000	12,600	122	127	80,377
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	19,581	2,034	0	1,040	270	281	292	304	316	24,120
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	0	17,000	6,000	0	0	0	23,001
TOTAL	**104,552**	**2,353**	**42,342**	**1,146**	**25,906**	**24,282**	**12,893**	**426**	**443**	**172,000**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe Clean Water Program Fund	90,875
Watershed Stream Stewardship Fund	23,001
State of California	36,883
City of Morgan Hill	3,341
Total	**172,000**
U.S. Army Corps of Engineers - In-kind Services	65,000

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the design phase.

USEFUL LIFE: 30+ Years

Project	**San Francisco Bay Shoreline**
Program	Flood Protection – Multiple Watersheds
Priority No.	74
Project No.	00044026s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



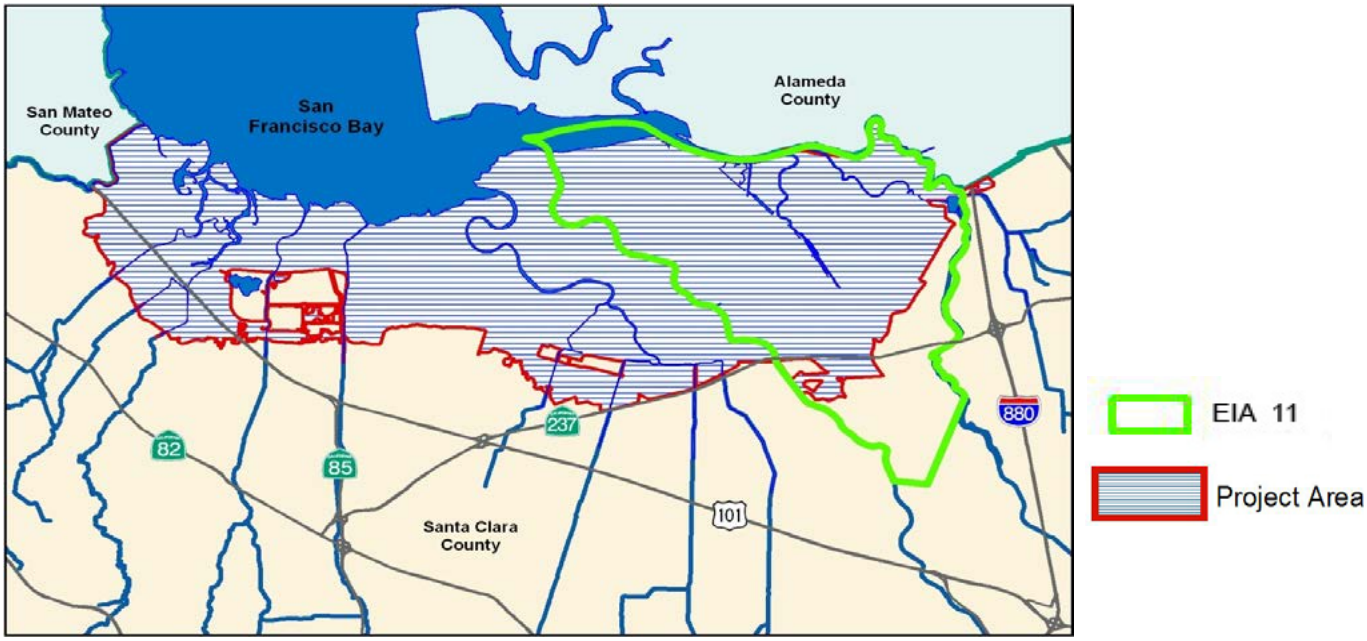
Typical natural tidal marshland in San Francisco Bay near the Shoreline project area

PROJECT DESCRIPTION

This project partners with the California Coastal Conservancy, U.S. Army Corps of Engineers (Corps), and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline. Project number 00044026 funded the Corps Feasibility Study effort for the North San Jose area, known as Economic Impact Area 11 (EIA 11) which was completed in FY 17; this project number will continue to fund other Shoreline effort outside of the Safe, Clean Water (SCW) project numbers. The District share of the EIA 11 design and construction is $45.6M. It is expected that some Measure A will partially fund this project. SCW funds will provide $15 million toward the District's cost share of the design and partial construction efforts for EIA 11 and $5 million toward the District's cost share of the planning and design efforts for the remaining EIAs to accomplish the following objectives:

- Provide integrated fluvial and one-percent tidal flood protection.
- Provide protection for future sea level rise projections.
- Restore and/or enhance tidal marsh and related habitats.
- Provide recreational and public access opportunities throughout the tidal floodplain of Santa Clara County.
- Pursue continued federal funding.
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency at completion of the Construction Phase.
- Coordinate closely with the South Bay Salt Pond Restoration Project, City of San Jose, U.S. Fish and Wildlife Services, the community and key stakeholders.

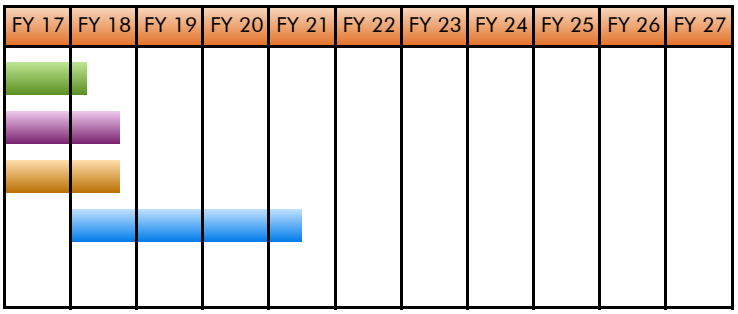
PROJECT LOCATION



SCHEDULE & STATUS

July 2003 to December 2020

Phase	Cost
Plan	14,167
Permits	136
Design	2,931
Construct	22,099
Closeout	-
	39,333



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
00044026-San Francisco Bay Shoreline	14,225	1,829	2,721	0	0	0	0	0	18,775
with inflation	14,225	1,829	2,721	0	0	0	0	0	18,775
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	359
with inflation	359	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	21	5,450	6,728	3,300	3,300	2,900	0	0	21,699
with inflation	21	5,450	6,728	3,509	3,619	3,264	0	0	22,591
26444002-Other EIAs Planning	1,420	622	432	1,000	1,000	1,000	600	0	6,074
with inflation	1,420	622	432	1,082	1,125	1,170	730	0	6,580
TOTAL	**16,025**	**7,901**	**10,234**	**4,300**	**4,300**	**3,900**	**600**	**0**	**46,907**
with inflation	**16,025**	**7,901**	**9,881**	**4,591**	**4,744**	**4,434**	**730**	**0**	**48,305**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
00044026-San Francisco Bay Shoreline	14,557	1,497	0	2,721	0	0	0	0	0	18,775
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	6,548	6,247	7,324	0	2,913	3,619	3,264	0	0	22,591
26444002-Other EIAs Planning	3,334	422	1,714	0	0	924	1,170	730	0	6,580
TOTAL	**24,798**	**8,166**	**9,038**	**2,721**	**2,913**	**4,543**	**4,434**	**730**	**0**	**48,305**

Adjusted Budget includes adopted budget plus a planned budget adjustment for $1,497,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	16,703
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	29,171
California Department of Water Resources (Pending)	420
Total	**48,305**
Federal Partners, South Bay Salt Ponds (SBSP)	48,470
State, SBSP	14,720
Foundations, Packard-Hewlett-Goldman-Moore, SBSP	17,060
Coastal Conservancy, Shoreline	2,010
Federal, Corps of Engineers, Shoreline	8,990
Total Partnership Funding for In-kind Services	**91,250**

OPERATING COST IMPACTS

Operating costs will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**Watersheds Asset Rehabilitation Program**
Program	Flood Protection - Multiple Watersheds
Priority No.	74
Project No.	62084001
District Contact	Ngoc Nguyen NNguyen@valleywater.org



View of damage caused by burrowing animlas along West Branch of Llagas Creek in the Uvas/Llagas Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to levee and stream bank sites that have erosion damage. Each site requires a different type of repair based on location, severity, and velocities in the creek. The objective of this project is to restore the stream bank or levee to a stable condition so as to reduce the risk of flooding and/or damage to adjacent properties and facilities. For facilities with animal conflict damage, the objective is to repair the damage caused by animas and where applicable, install deterrents for future animal activities. The repair work consists of, but is not limited to:

- Excavation and rebuilding of eroded soil material.
- Installation of rodent barriers such as mesh or fabric.
- Repairing the banks with methods commensurate with the extents of damage and environmental constraints.
- Geomorphic channel restoration with bed and bank repair.
- Outfall restoration and repair.
- Sediment removal and fish ladder and blockage repair.
- Fish ladder modifications and repairs.

PROJECT LOCATION

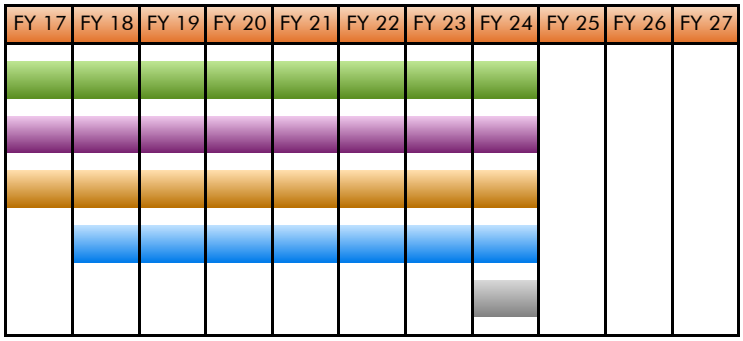


SCHEDULE & STATUS

This project is part of a larger asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	3,620
Permits	2,103
Design	8,262
Construct	4,218
Closeout	297
	18,500



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
62084001-Watersheds Asset Rehabilitation Program	1,797	1,110	11,655	3,800	1,777	9,489	12,562	16,903	59,093
with inflation	1,797	1,110	11,655	4,073	1,999	10,786	14,701	20,729	66,850

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
62084001-Watersheds Asset Rehabilitation Program	2,728	787	608	11,047	4,073	1,999	10,786	14,701	20,729	66,850

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	66,850
Other Funding Sources	0
Total	**66,850**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Water Resources Stewardship Capital Improvements

WATER RESOURCES STEWARDSHIP OVERVIEW

The District plans, designs and constructs various capital projects to meet the Board's Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and improve the quality of life in Santa Clara County." These projects may fulfill environmental enhancement, mitigation or stewardship goals and priorities.

The District has placed an emphasis on stewardship since 1999 when the Water District's Board of Directors adopted a mission and policies that added a focus on environmental stewardship. In 2001, the California legislature added environmental stewardship to the Water District's purpose. Specifically, the Water District's environmental stewardship activities focus on these three areas:

- Healthy creek and bay ecosystems
- Clean, safe water in creeks and the bay
- Improved quality of life through trails, open space and water resources management

The Water District's stewarship work is extensive. Actions to protect the environment are woven into all we do. Some of the Districts stewardship accomplishments since 2000 are:

- Rehabilitated or restored 90 acres of riparian habitat and 600 acres of tidal wetland habitat
- Provided funding for 92 projects that resulted in 71 miles of public access
- Removed over 2,660 lbs of mercury from the Guadalupe Watershed
- Made 40 miles of streams accessible for fish
- In conjunction with the Open Space Authority, acquiring 1,300 acres of land for preservation of California Red Legged Frog and California Tiger Salamander habitat

Environmental Enhancement & Stewardship Projects

Environmental Enhancement projects are constructed at the direction of the Board either to meet the Safe, Clean Water and Natural Flood Protection program (SCW) obligations or to meet other Board priorities.

The District's Safe, Clean Water Program, approved by the voters of Santa Clara County in 2012, committed funding for environmental enhancement activities that create or restore tidal or riparian habitat. A selection process will be conducted to allocate the SCW funding to the enhancement opportunities that meet Board-defined characteristics.

Stewardship projects are implemented to promote water quality awareness; reduce pollutants in streams; support additional trails, parks and open space; support creek side recreation; and reduce green house gas. Stewardship projects are implemented at the discretion of the Board when reasonable and appropriate. These projects are often accomplished in partnership with or support of other agencies.

Major Capital Improvements Identified in the CIP

- FAHCE Stevens Creek Fish Passage Enhancement
- Almaden Lake Improvements
- Salt Ponds A5-11 Restoration
- SCW Fhis Passage Improvements
- South Bay Salt Ponds Restoration

Mitigation Projects

The District manages many mitigation sites and continues to plan, design, and construct new mitigation sites to fulfill CEQA and regulatory permit requirements for both capital projects and operations activities. Mitigation requirements for capital projects may be incorporated into the project scope or accomplished as a separate project.

Major Capital Improvements Identified in the CIP

- SMP Mitigation, Stream and Watershed Land Preservation

Water Resources Stewardship Capital Improvements

Feasibility Studies

In July 2016 the board provided direction for increased visibility and accelerated delivery of Environmental Stewardship Projects to meet Board priorities. The District has dedicated 4 additional full-time positions to complete the feasibility studies that have been included in the FY 2018-22 CIP. These feasibility studies will determine the viability of a number of projects that are of interest to the community.

Major Capital Improvements Identified in the CIP

- Watershed Habitat Enhancement

PRIORITY PROCESS AND FINANCIAL ANALYSIS

Environmental Enhancement and Stewardship projects are implemented at the discretion of the Board. Projects may go through a ranking process to compete for Safe, Clean Water funds or the Board may direct that other available revenue be used to implement the proposed projects. The inclusion of these projects in the Fiscal Year 2018-22 CIP has been approved by the Board. The priority criteria used to evaluate these projects are included in Appendix A.

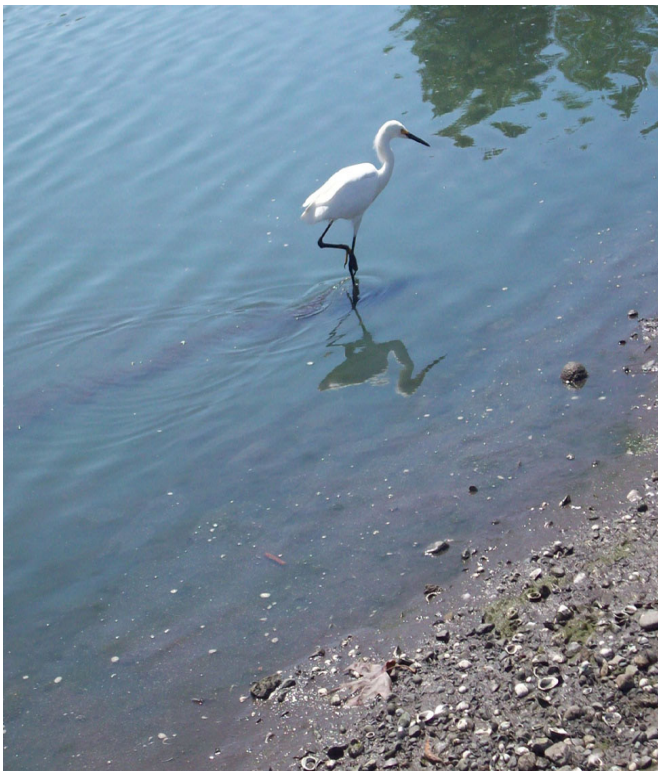


Implementation of Mitigation projects is considered non-discretionary since they are needed to meet California Environmental Quality Act (CEQA) or regulatory permit commitments. Funding for mitigation projects is allocated without a prioritization process.

Financial analysis of the following funding sources for Water Resources Stewardship capital improvements was conducted to determine if there are limitations to funding currently planned capital projects.

- Watershed and Stream Stewardship Fund
- Safe, Clean Water Fund
- Water Utility Enterprise Fund

Funding needs for approved Water Resources Stewardship projects can be met.



Water Resources Stewardship Capital Improvements

The following table is a project funding schedule for water resources stewardship capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2016-17.

Water Resources Stewardship Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
	ENVIRONMENTAL ENHANCEMENT & STEWARDSHIP										
	Lower Peninsula Watershed										
00294001s	FAHCE Stevens Creek Fish Passage Enhancement D4.x	850	-	-	-	1,567	3,164	-	-	-	5,581
26164001	Hale Creek Enhancement Pilot Study (D6)	463	482	268	1,306	2,673	-	-	-	-	4,924
	Guadalupe Watershed										
26044001	Almaden Lake Improvements (D4.1a)	2,665	1,044	560	654	297	-	-	-	-	4,660
	Multiple Watersheds										
20444001	Salt Ponds A5-11 Restoration	2,518	1,715	-	754	1,838	1,680	-	-	-	8,505
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)	1,461	2,203	215	222	2,415	-	-	-	-	6,301
26C40370	SCW Implementation Fund	-	-	-	-	9,257	16,531	11,060	2,405	23,658	62,911
26444003	South Bay Salt Ponds Restoration (D8)	535	-	49	13	3,564	-	-	-	-	4,112
	ENVIRONMENTAL FEASIBILITY STUDIES										
62044001	Watershed Habitat Enhancement Studies	-	90	-	1,167	1,119	-	-	-	-	2,376
	ENVIRONMENTAL MITGATION										
62184001	SMP Mitigation, Stream and Watershed Land Preservation	15,714	510	1	509	-	-	-	-	-	16,733
	TOTAL	24,206	6,044	1,093	4,625	22,730	21,375	11,060	2,405	23,658	116,103

FY 2016-17 Funds to be reappropriated

The following table shows funding requirements from each funding source for mitigation capital improvements.

Water Resources Stewardship – Funding Sources ($K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	765	-	-	-	2,134	3,597	775	802	7,886	15,959
12	Watershed Stream Stewardship Fund	18,317	2,315	1	2,430	3,838	2,745	775	802	7,886	39,108
26	Safe, Clean Water and Natural Flood Protection Fund	5,124	3,729	1,092	2,195	16,758	15,033	9,510	802	7,886	61,037
	TOTAL	24,206	6,044	1,093	4,625	22,730	21,375	11,060	2,405	23,658	116,103

FY 2016-17 Funds to be reappropriated

This page intentionally left blank.

Project	**FAHCE Stevens Creek Fish Passage Enhancement**
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	72
Project No.	00294001s
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Example of a fish ladder to be modified or reconstructed for better fish passage

PROJECT DESCRIPTION

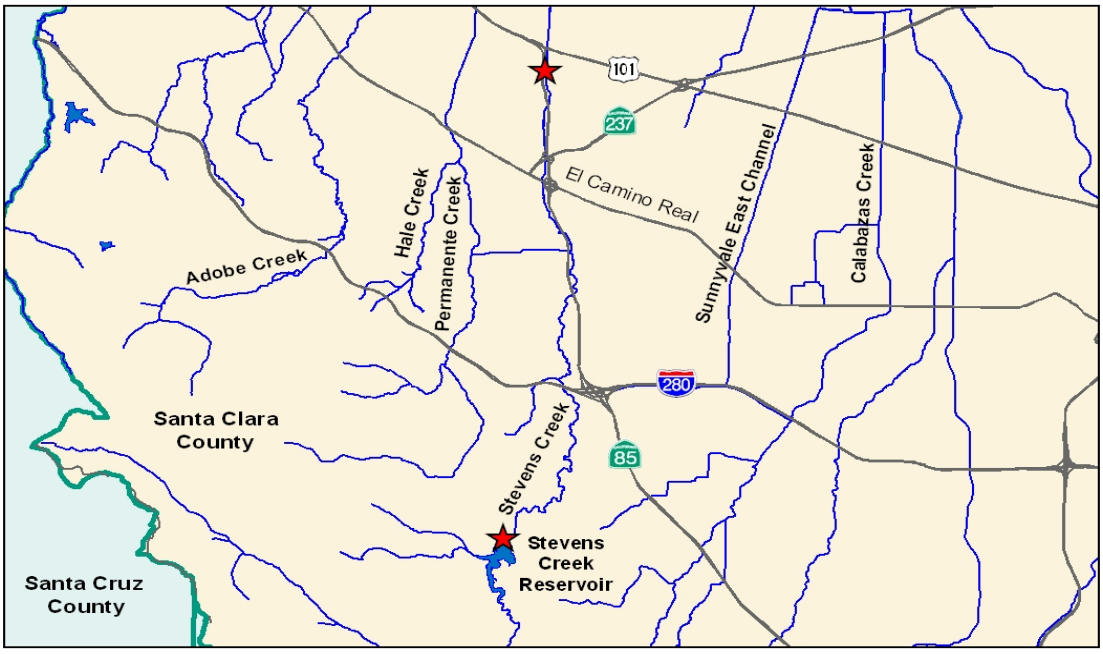
This project plans, designs, and constructs improvements to the Moffett Boulevard fish ladder to improve fish passage as well as a multiport outlet at Stevens Creek Dam to accomplish the following objectives:

- Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed.
- Provide a suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone determined on an annual basis through the development of an operations plan.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles.

This project is accounted for in the following job numbers:

- 00294001—Fish Passage Planning
- 00C40145—Moffett Boulevard Fish Ladder
- 00C40198—Multi-Port Outlet at Dam

PROJECT LOCATION

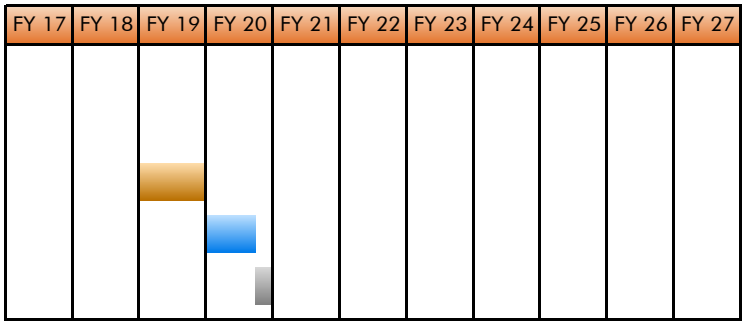


SCHEDULE & STATUS

July 2008 to June 2020

Planning phase is complete. Project on hold pending completion of the Three Creeks Habitat Conservation Plan, to be done in a separate operating project.

Phase	Cost
Plan	850
Permits	108
Design	1,341
Construct	2,860
Closeout	35
	5,194



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	850
with inflation	850	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	1,154	1,864	0	0	0	3,019
with inflation	0	0	0	1,249	2,037	0	0	0	3,286
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	294	1,031	0	0	0	1,325
with inflation	0	0	0	318	1,127	0	0	0	1,446
TOTAL	**850**	**0**	**0**	**1,449**	**2,895**	**0**	**0**	**0**	**5,194**
with inflation	**850**	**0**	**0**	**1,567**	**3,164**	**0**	**0**	**0**	**5,581**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	0	1,249	2,037	0	0	0	3,286
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	0	318	1,127	0	0	0	1,446
TOTAL	**850**	**0**	**0**	**0**	**1,567**	**3,164**	**0**	**0**	**0**	**5,581**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund–10%	558
SCVWD Water Utility Enterprise Fund–90%	5,023
Total	**5,581**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Hale Creek Enhancement Pilot Study**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	77
Project No.	26164001
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Reach to be modified downstream of 7th Day Adventist foot bridge between Marilyn Drive and North Sunshine Drive.

PROJECT DESCRIPTION

This pilot project plans, designs, and constructs improvements to an approximately 500-foot long reach in Hale Creek to accomplish the following objectives:

- Provide flood protection and enhance habitat values.
- Restore stream recharge capability to a concrete-lined portion.
- Remove existing concrete channel and replace with a vegetated soft-bottom channel.

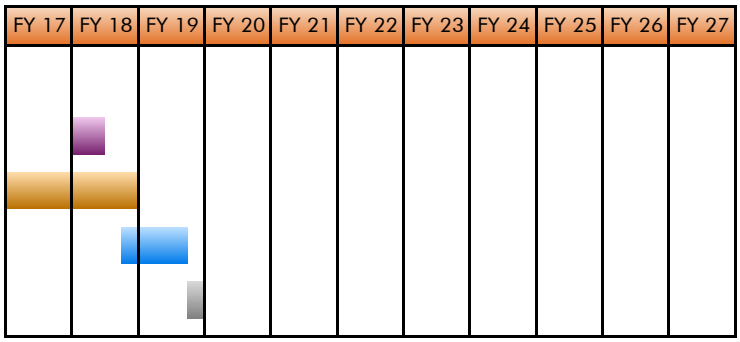
PROJECT LOCATION



SCHEDULE & STATUS

May 2015 to June 2019

Phase	Cost
Plan	33
Permits	144
Design	896
Construct	3,670
Closeout	10
	4,753



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26164001-Hale Creek Enhancement Pilot Study	331	346	1,574	2,510	0	0	0	0	4,761
with inflation	331	346	1,574	2,673	0	0	0	0	4,924

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26164001-Hale Creek Enhancement Pilot Study	463	482	268	1,306	2,673	0	0	0	0	4,924

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	4,924
Other Funding Sources	0
Total	4,924

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE:

Not available

Project	**Almaden Lake Improvements**
Program	Water Resources Stewardship – Environmental Enhancement
Priority No.	85
Project No.	26044001
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Looking southerly at Almaden Lake through which Alamitos Creek flows.

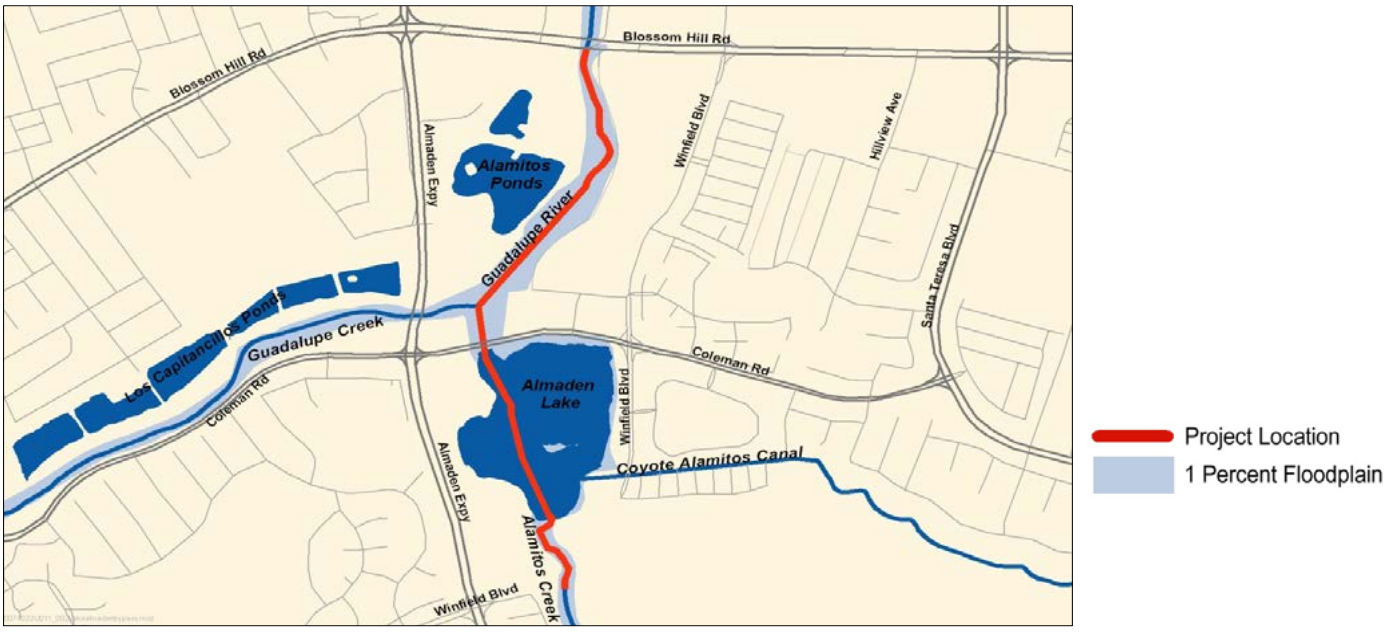
PROJECT DESCRIPTION

The project will separate Alamitos Creek from Almaden Lake and restore Alamitos Creek's stream function within the footprint of Almaden Lake. The goals are to improve water quality and physical habitat for steelhead and other anadromous fish by separating the creek from the lake while incorporating the principle of geomorphic design and to create a self-sustaining channel that requires little maintenance to keep it viable for fisheries and wildlife benefits. Benefits of this project will be creation of channel complexity in the restored stream channel such as instream riffle-pool habitat, cover for rearing fish, gravel to support spawning and plantings that will provide numerous ancillary wildlife benefits; reduction of high water temperatures released from Almaden Lake into Alamitos Creek; and removal of entrainment, predatory and methylmercury impacts to anadromous fish from Almaden Lake. The objectives are as follows:

- Separate Alamitos Creek from Almaden Lake.
- Reduce thermal barrier to migration of anadromous fish.
- Remove entrainment and impacts from predatory species to anadromous fish.
- Reduce mercury concentration in target fish to meet applicable water quality objectives.
- Minimize impacts to recreational features.

This project is funded for the planning and design phase from the Safe, Clean Water, Priority D4. Funding for construction may also be available from the Safe, Clean Water Program.

PROJECT LOCATION

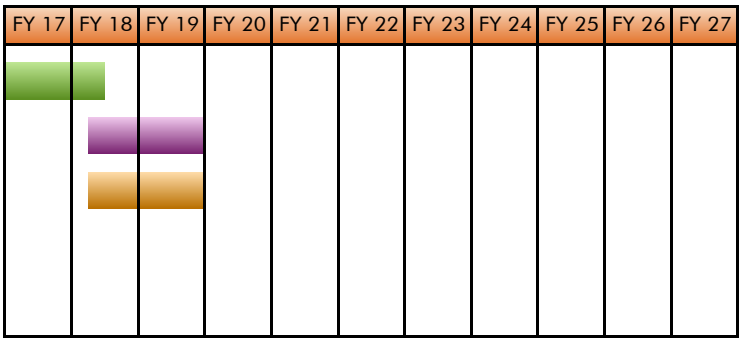


SCHEDULE & STATUS

July 2011 to June 2019

Planning Phase and some Design tasks. Construction is not funded at this time.

Phase	Cost
Plan	2,168
Permits	1,778
Design	690
Construct	-
Closeout	-
	4,636



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26044001-Almaden Lake Improvements	2,264	885	1,214	275	0	0	0	0	4,638
with inflation	2,264	885	1,214	297	0	0	0	0	4,660

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26044001-Almaden Lake Improvements	2,665	1,044	560	654	297	0	0	0	0	4,660

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	800
SCWD Safe Clean Water Fund	3,860
Total	**4,660**

OPERATING COST IMPACTS

No operating cost impacts are expected from the completion of the planning and design phases of the project.

USEFUL LIFE: 100 Years

Project	**Salt Ponds A5-11 Restoration**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	50
Project No.	20444001
District Contact	Vincent Gin VGin@valleywater.org



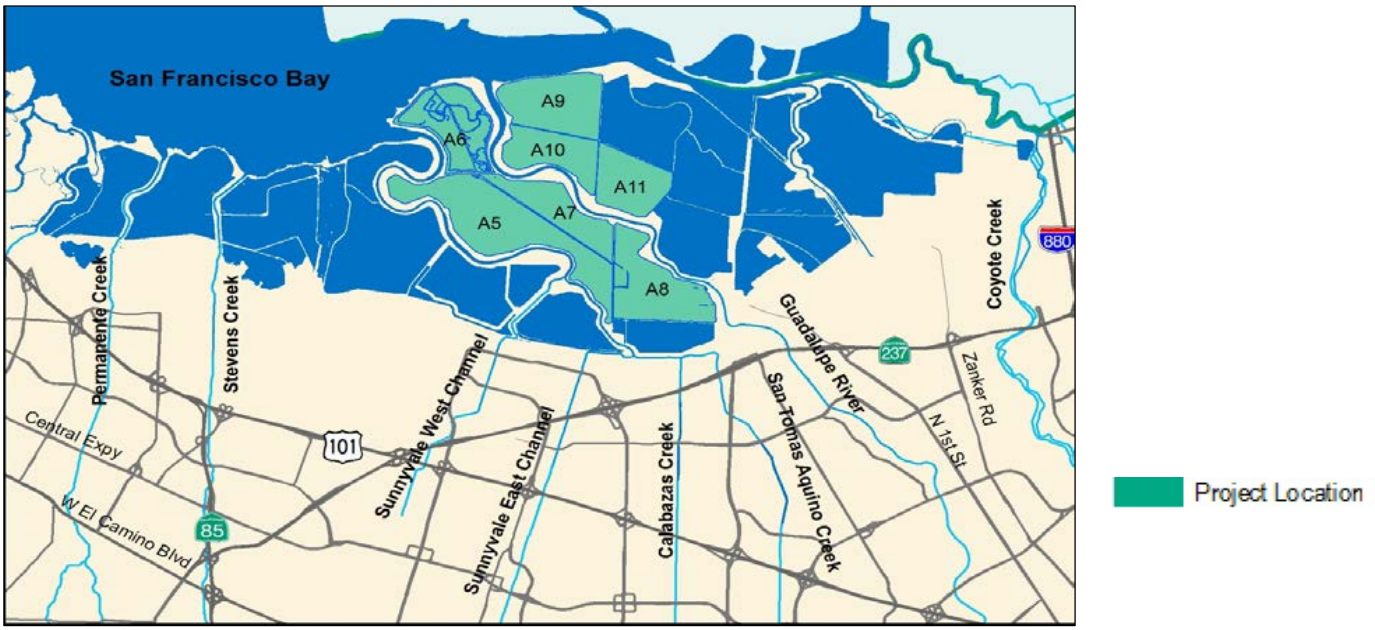
View of Notch Location at Pond A8

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the South Bay Salt Ponds (SBSP) and will collaborate with the SBSP Phase II restoration efforts to accomplish the following objectives:

- Realign Calabazas and San Tomas Creeks to flow directly into Pond A8
- Meet permiting requirements for the creek's realignment or further restoration efforts
- Fully open the Pond A8 Notch to increase tidal flow into the pond
- Restoration of Ponds A5 through A11 of the Alviso Complex

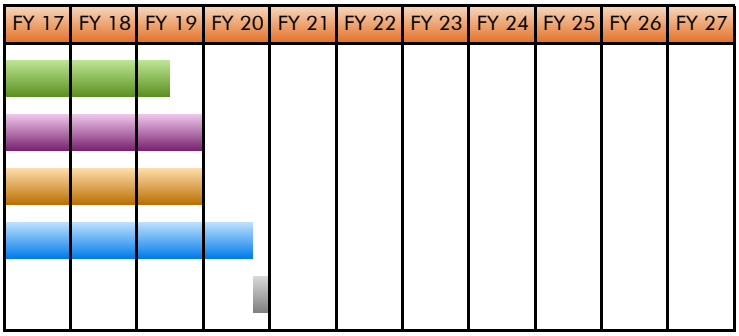
PROJECT LOCATION



SCHEDULE & STATUS

July 2015 to June 2020

Phase	Cost
Plan	1,521
Permits	1,959
Design	281
Construct	3,974
Closeout	5
	7,740



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
20444001-Salt Ponds A5-11 Restoration	2,008	2,225	754	1,722	1,528	0	0	0	8,237
with inflation	2,008	2,225	754	1,838	1,680	0	0	0	8,505

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
20444001-Salt Ponds A5-11 Restoration	2,518	1,715	0	754	1,838	1,680	0	0	0	8,505

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	8,505
Other Funding Sources	0
Total	**8,505**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $4 million every 3 years, beginning in FY 2020, for on-going sediment removal.

USEFUL LIFE:

Not Available

Project	**SCW Fish Passage Improvements** (Bolsa Rd.)
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	80
Project No.	26044002
District Contact	Vincent Gin VGin@valleywater.org



View of the Bolsa Road fish barrier removed will be allowing fish access to upstream habitat

PROJECT DESCRIPTION

This project plans, designs and constructs improvements for two high priority fish barriers in Santa Clara County. A third priority barrier, owned by the City of San Jose, will be remediated through a project partnership with funds allocated from this project. The project will accomplish the following objectives:

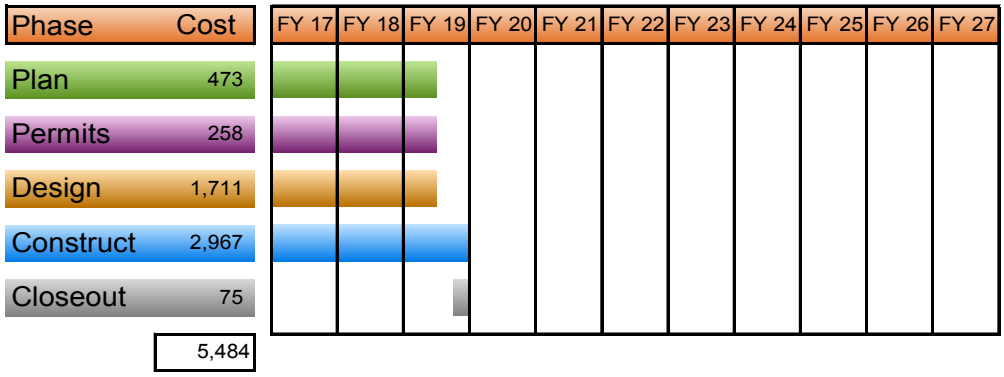
- Planning, design and construction for a passage impediment at the Evelyn Bridge preventing upstream/downstream movement of steelhead in the Stevens Creek watershed. Remediation of this barrier will facilitate movement to 8.8 miles of higher quality upstream habitat and allow for out-migrant fish to access San Francisco Bay unimpeded. (Completed in 2016)
- Planning, design and construction for a passage impediment at the Bolsa Road railroad bridge in the Uvas Watershed. Remediation of this site will allow access to approximately 22 miles of higher quality habitat upstream as well as unimpeded access for out-migrant fish through the project site.
- Prepare a partnership agreement and provide technical support to the City of San Jose for removal of the Singleton Road Bridge in Coyote Creek. Removal of this passage impediment will facilitate movement of migratory fish for approximately 17.6 miles creek above the site and allow for unimpeded access of out-migrant fish through the site.

PROJECT LOCATION



SCHEDULE & STATUS

July 2015 to June 2019



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	1,246	2,203	437	2,261	0	0	0	0	6,147
with inflation	1,246	2,203	437	2,415	0	0	0	0	6,301

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	1,461	2,203	215	222	2,415	0	0	0	0	6,301

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	6,301
Other Funding Sources	0
Total	**6,301**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50 Years

Project	**SCW Implementation Fund**
Program	Water Resources Stewardship
Priority No.	75
Project No.	26C40370
District Contact	Ngoc Nguyen NNguyen@valleywater.org



View looking upstream at Almaden Lake from the Guadalupe Creek confluence. This is just one possible site under consideration.

PROJECT DESCRIPTION

This project is a placeholder for future capital projects that have not been fully defined. These projects will implement Safe Clean Water (SCW) objectives and are likely to include projects such as Comer Debris Basin, and construction of Lake Almaden-Guadalupe River-Alamitos Creek Restoration. Funds will be moved from this project into actual projects once they have been defined and vetted to ensure they meet the following program objectives:

- Create favorable stream conditions to restore and maintain fisheries.
- Increase the stability of stream channels through construction based on geomorphic principals.
- Acquisition of property for the conservation of habitat.

PROJECT LOCATION

No map is provided for this project

SCHEDULE & STATUS

July 2018 to June 2032

Data shown here is based on preliminary information. Specific projects identified to move forward will require further refinement. A Phase schedule will be defined in the planning phase.

Phase	Cost
Plan	-
Design	-
Construct	62,911
Closeout	-
	62,911

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26C40370-SCW Implementation Fund	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911
with inflation	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
26C40370-SCW Implementation Fund	0	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	41,039
SCVWD Water Utility Enterprise Fund	10,936
SCVWD Watershed and Stream Stewardship Fund	10,936
Total	**62,911**

OPERATING COST IMPACTS

Not Available

USEFUL LIFE:

Not Available

Project	**South Bay Salt Ponds Restoration**
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	43
Project No.	26444003
District Contact	Vincent Gin VGin@valleywater.org



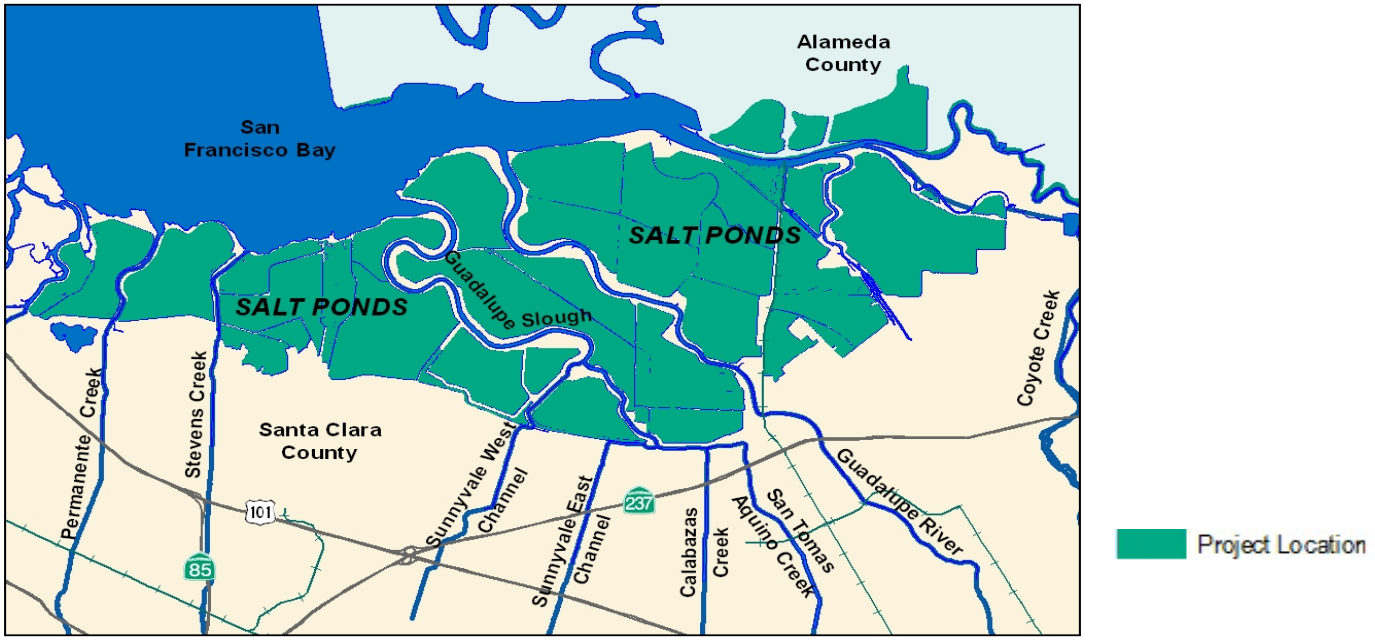
View of one of the former salt evaporator facilities near Alviso

PROJECT DESCRIPTION

This project plans, designs, and constructs roads or other improvements to the South Bay Salt Ponds to accomplish the following objectives:

- Repurpose of sediments removed from streams through the Stream Maintenance Program.
- Improve or construct roads at new placement sites.
- Restore the South Bay Salt Ponds to improve wildlife habitat and protect residents from tidal flooding.

PROJECT LOCATION

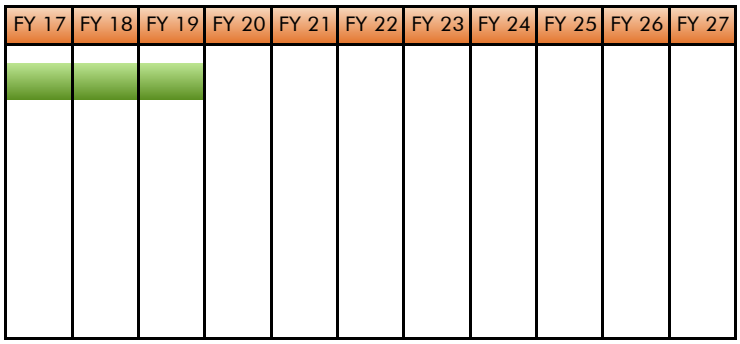


SCHEDULE & STATUS

June 2013 to June 2019

Planning Study Only

Phase	Cost
Plan	3,725
Permits	18
Design	-
Construct	76
Closeout	-
	3,819



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
26444003-South Bay Salt Ponds Restoration	217	269	62	3,295	0	0	0	0	3,843
with inflation	217	269	62	3,564	0	0	0	0	4,112

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
26444003-South Bay Salt Ponds Restoration	535	0	49	13	3,564	0	0	0	0	4,112

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	4,112
Other Funding Sources	0
Total	4,112

OPERATING COST IMPACTS

Planning Phase Only: The completion of this phase of the project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE:

Not Available

Project	**Watershed Habitat Enhancements**
Program	Water Resources Stewardship
Priority No.	N/A
Project No.	62044001
District Contact	Vincent Gin VGin@valleywater.org



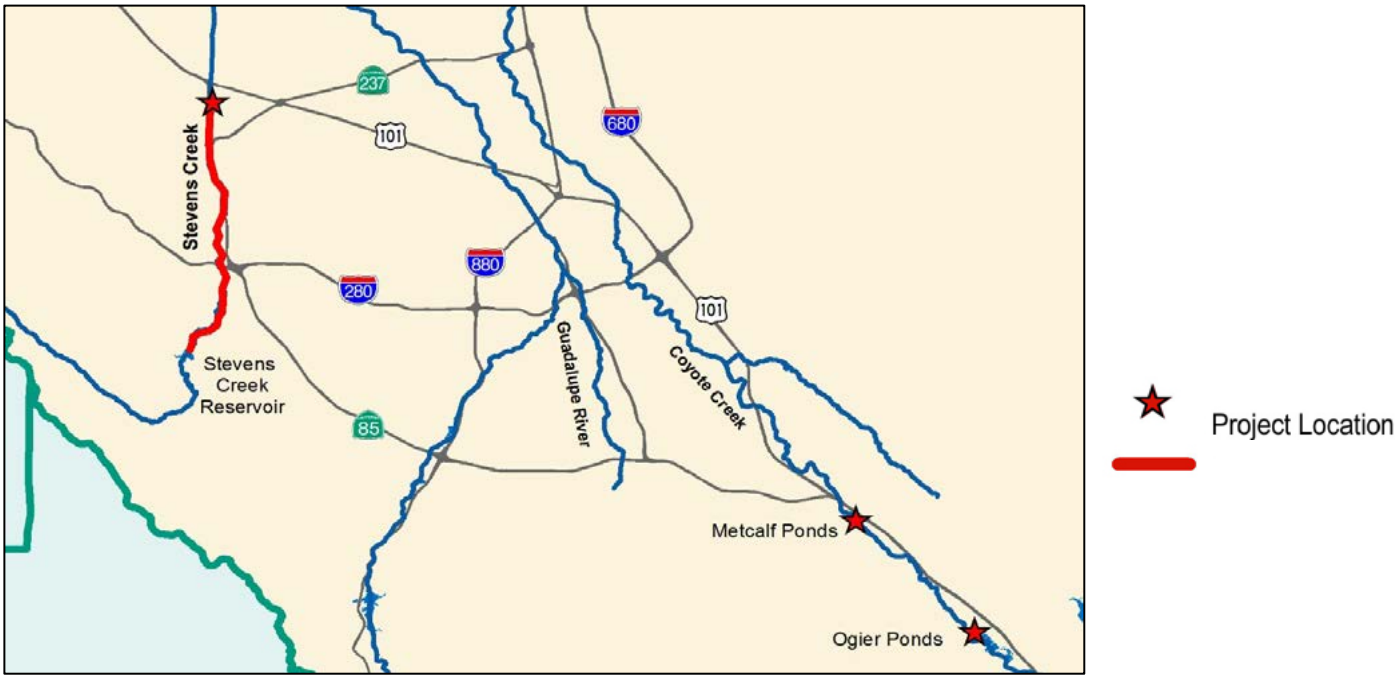
Aerial view looking downstream of the Ogier Pond complex.

PROJECT DESCRIPTION

This project provides for feasibility studies of possible habitat enhancements at the Ogier Ponds and Metcalf Ponds along Coyote Creek and an evaluation and determination of priority for addressing various fish passage barriers along Stevens Creek. This project accomplishes the following objectives:

- Enhance a healthy steelhead trout and salmon population in the Coyote Creek watershed.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles along Stevens Creek.

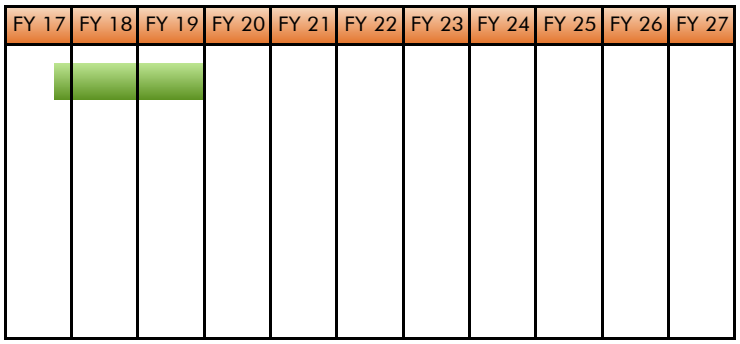
PROJECT LOCATION



SCHEDULE & STATUS

April 2017 to June 2019

Phase	Cost
Plan	2,292
Permits	-
Design	-
Construct	-
Closeout	-
	2,292



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
62044001-Watershed Habitat Enhancements	0	90	1,167	1,035	0	0	0	0	2,292
with inflation	0	90	1,167	1,119	0	0	0	0	2,376

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
62044001-Watershed Habitat Enhancements	0	90	0	1,167	1,119	0	0	0	0	2,376

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed & Stream Stewardship Fund	2,376
Other Funding Sources	0
Total	2,376

OPERATING COST IMPACTS

No operating impacts are anticipated from this project because this is a feasibility study. New projects may be proposed as potential sites are evaluated.

USEFUL LIFE: N/A

Project	**SMP Mitigation Stream and Watershed Land Preservation**
Program	Water Resources Stewardship – Mitigation
Priority No.	99
Project No.	62184001
District Contact	Ngoc Nguyen NNguyen@valleywater.org



Creek-side settings such as this will be used for stream and watershed land preservation. Actual locations will differ.

PROJECT DESCRIPTION

This project preserves streams and watershed lands in the Santa Clara Basin and implements appropriate restorations in these lands to accomplish the following objectives:

- Provide 71 acres of Stream Maintenance Program (SMP) mitigation credits through preservation of approximately 720 to 950 acres of streams and watershed lands to provide long-term protection of unique and valuable local stream resources and watersheds, in a largely self-sustaining setting. Approximately 108 acres of the total land preservation will be for protection of riparian and upland habitats that are known to support California red-legged frogs and Western pond turtles.
- Provide approximately 10 acres of SMP mitigation credits through environmental restoration on the lands acquired.
- Seek opportunities to partner with other organizations to accomplish the project objectives.

PROJECT LOCATION

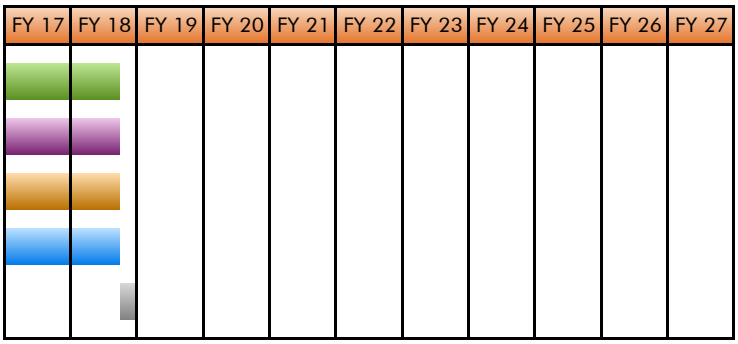
The project will purchase multiple sites for preservation in Santa Clara Basin as they become available.
No map is provided.

SCHEDULE & STATUS

July 2003 to June 2018

Some environmental tasks in the planning phase continue thru construction. Land acquisition is shown in the design phase, with restoration of site habitat shown in the construction phase.

Phase	Cost
Plan	2,068
Permits	996
Design	9,610
Construct	1,741
Closeout	20
	14,435



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	14,752	1,471	510	0	0	0	0	0	16,733
with inflation	14,752	1,471	510	0	0	0	0	0	16,733

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	15,714	510	1	509	0	0	0	0	0	16,733

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	16,733
Other Funding Source	0
Total	**16,733**

OPERATING COST IMPACTS

Operating cost will vary, depending on the type of acquisition ownership and requirements for maintenance of each site. The Stevens Canyon Ranch Conservation Easement was acquired in December 2006 and there are no operating impacts to the District. The property owner, Mid-Peninsula Regional Open Space District is responsible for maintenance and management of the site.

USEFUL LIFE: 50+ Years

Building and Grounds Capital Improvements

BUILDINGS AND GROUNDS OVERVIEW

The District's Almaden-Winfield campus occupies nearly 50 acres along Almaden Expressway in the City of San Jose. The District manages the campus to ensure a healthful and safe work environment for employees and visitors. The campus includes 10 buildings, multiple parking lots, a corporation yard, landscaping, and other appurtenances.

With most of the buildings on campus over 30 years old, the rehabilitation needs increased steadily in recent years. The District administers an asset management program for its buildings and grounds infrastructure that includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

In January of 2012 the Board approved implementation of the Campus Master Plan which includes the following:

- Repair and rehabilitate the existing Corporation yard.
- Repair Winfield Warehouse and Winfield Vegetation buidlings.
- Replace the Maintenance Office and Ready Room buildings.

Major Capital Improvements Identified in the CIP

- Almaden & Winfield Campus Small Capital Improvements
- Headquarters Operations Building
- Winfield Capital Improvements

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the buildings and grounds projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the following funding sources for buildings and grounds capital improvements was conducted to determine if there are limitations to funding all the proposed capital projects.

- Watershed and Stream Stewardship Fund
- General Fund
- Water Utility Enterprise Fund

Results of this year's prioritization process and financial analysis are summarized in Appendix B. The process concluded that the Almaden and Winfield Campus Small Capital Improvements will continue to be funded at $2 million per year to meet the higher priority Buildings and Grounds needs. The first of the projects from the Campus Master Plan began in FY 2012-13 and the Headquarters Operations Building was added to the FY 2015-19 CIP.

Building and Grounds Capital Improvements

The following table is a project funding schedule for buildings and grounds capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2016-17.

Buildings and Grounds Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
60204016	Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	-	1,690	2,126	2,192	2,260	2,324	27,526	40,180
60204032	Headquarters Operations Building	1,176	0	1,151	-	1,002	3,825	6,949	4,867	-	17,819
60204021	Winfield Capital Improvements	1,726	325	-	-	-	-	-	-	-	2,051
	TOTAL	2,902	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	60,050

FY 2016-17 Funds to be reappropriated

The following table shows funding requirements from each funding source for buildings and grounds capital improvements.

Buildings and Grounds – Funding Sources ($K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
11	General Fund	2,902	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	60,050
	TOTAL	2,902	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	60,050

FY 2016-17 Funds to be reappropriated

Project	**Almaden and Winfield Campus, Small Capital Improvements**
Program	Buildings and Grounds
Priority No.	73
Project No.	60204016
District Contact	Mike Cressap MCressap@valleywater.org

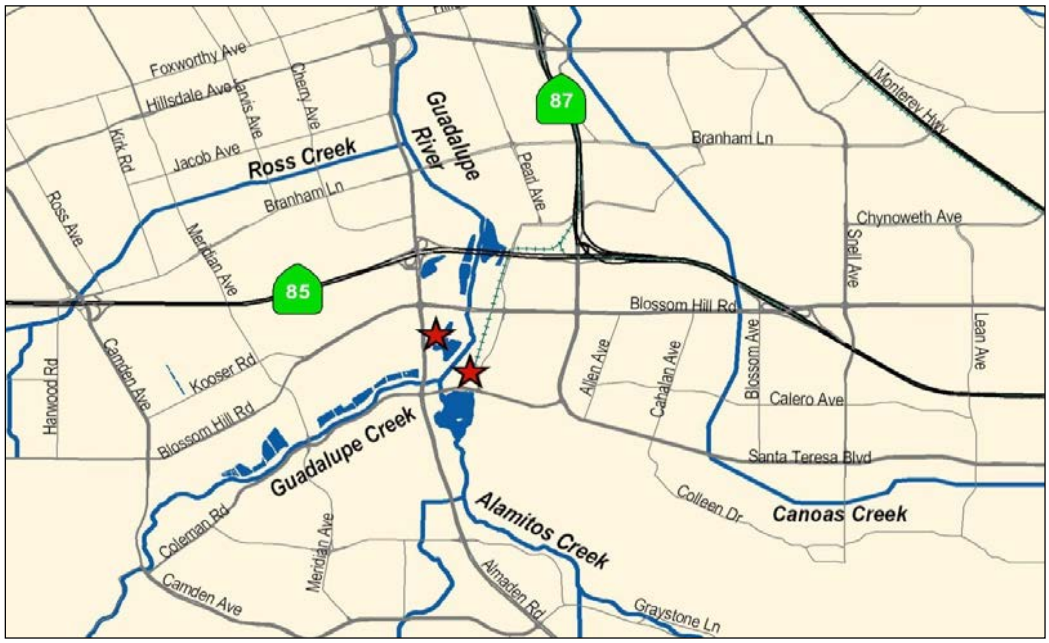


Front view of the Headquarters building at the Almaden Campus

PROJECT DESCRIPTION

This project reserves funding for capital maintenance and replacement of buildings, grounds, and facilities on the Almaden and Winfield campus, to provide a healthy and safe environment for staff and visitors.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

Improvements will be managed on an as-needed basis throughout the year.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	1,690	2,000	2,000	2,000	2,000	20,000	31,752
with inflation	n/a	2,062	1,690	2,126	2,192	2,255	2,324	27,527	40,177

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	0	1,690	2,126	2,192	2,255	2,324	27,527	40,177

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	40,177
Other Funding Source	0
Total	**40,177**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs. The purpose of these maintenance projects is to avoid unnecessary financial impact caused by building shut-down and work stoppage.

USEFUL LIFE: Not Available

Project	**Headquarters Operations Building**
Program	Buildings and Grounds
Priority No.	65
Project No.	60204032
District Contact	Katherine Oven KOven@valleywater.org



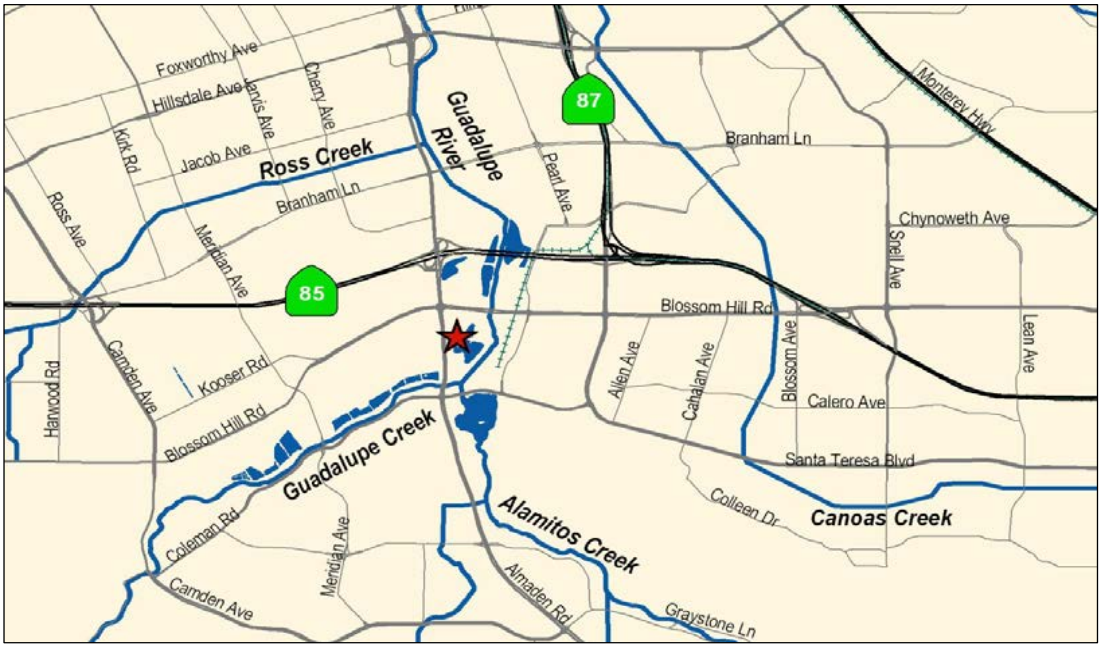
Existing Maintenance Building

PROJECT DESCRIPTION

This project plans, designs, and constructs a new operations building to replace the existing facility that has extensive deficiencies throughout. This project accomplishes the following objectives:

- Replace the Maintenance Office Building to provide a safe and healthy work environment and to meet code or regulatory requirements.
- Provide adequate and sufficient space to enable the District to efficiently perform its core business.

PROJECT LOCATION

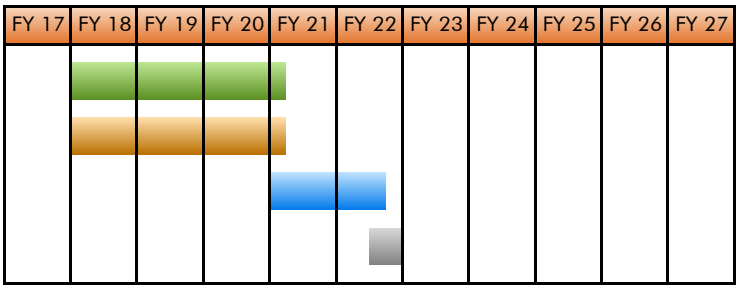


★ Project Location

SCHEDULE & STATUS

July 2014 to June 2022

Phase	Cost
Plan	3,463
Design	1,990
Construct	9,877
Closeout	23
	15,353



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60204032-Headquarters Operations Building	20	5	0	1,991	3,400	5,940	4,000	0	15,356
with inflation	20	5	0	2,153	3,825	6,949	4,867	0	17,819

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
60204032-Headquarters Operations Building	1,176	0	1,151	0	1,002	3,825	6,949	4,867	0	17,819

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	17,819
Other Funding Sources	0
Total	**17,819**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE:

Not Available

Project	**Winfield Capital Improvements**
Program	Buildings and Grounds
Priority No.	70
Project No.	60204021
District Contact	Katherine Oven koven@valleywater.org



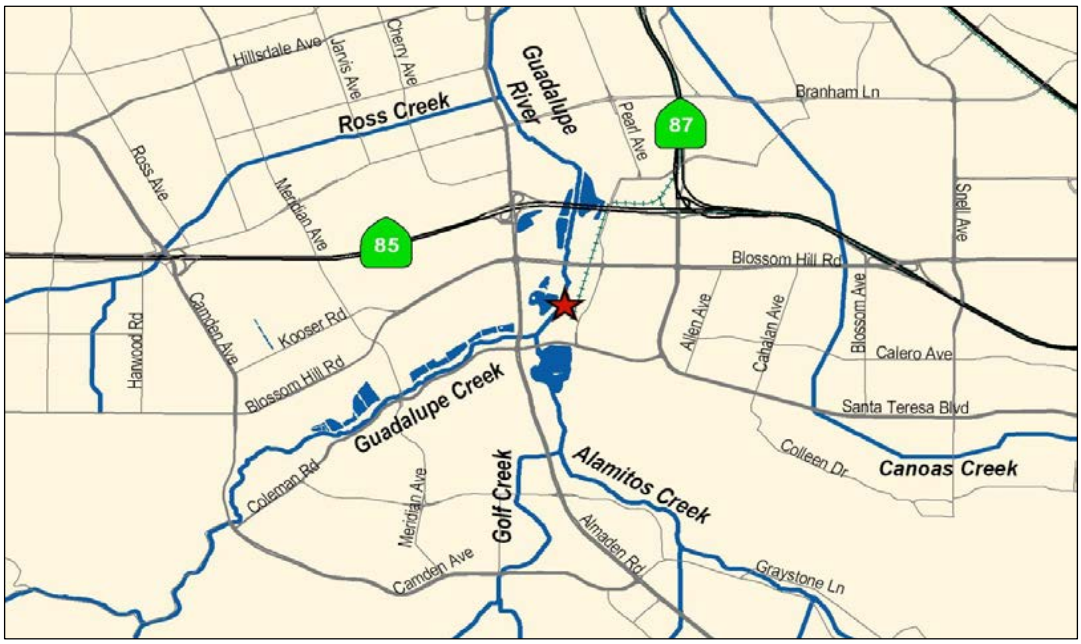
A view of the District's Vegetation Management building on Winfield Blvd

PROJECT DESCRIPTION

This project is to repair, maintain and improve the Winfield Warehouse and Winfield Vegetation Buildings, to provide a healthy and safe environment for staff and visitors. This includes improving restroom and shower facilities, enclosing the open section of the warehouse and providing a safe and fully functioning Class IV workshop, seismic upgrades and a new roof.

The Board declined to advertise the project for construction in August 2016. Subsequently, the District initiated a campus space planning assessment effort to review the overall need for office facilities and materials storage. Pending the outcome of this assessment staff will prepare a proposal for future use of the property for Board consideration.

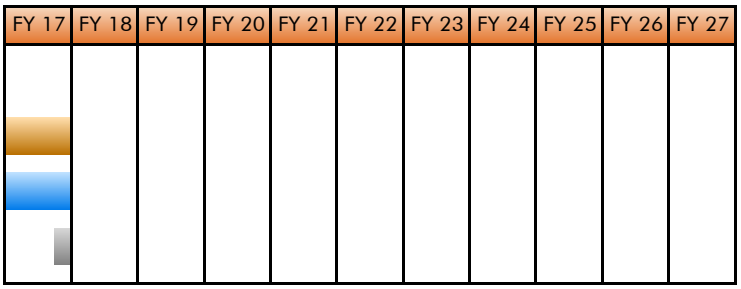
PROJECT LOCATION



SCHEDULE & STATUS

September 2012 to June 2017

Phase	Cost
Plan	105
Design	1,808
Construct	96
Closeout	25
	2,034



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
60204021-Winfield Capital Improvements	1,729	322	0	0	0	0	0	0	2,051
with inflation	1,729	322	0	0	0	0	0	0	2,051

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
60204021-Winfield Capital Improvements	1,726	325	0	0	0	0	0	0	0	2,051

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	2,051
Other Funding Source	0
Total	**2,051**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE:

Not Available

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

The District relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, the District completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects.

In 2014, the Information Technology Capital Fund was created, it accounts for the costs to aquire, and install capital information technology projects with District-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Data Consolidation
- Information Technology Disaster Recovery
- PeopleSoft System Upgrade and Expansion
- Software Upgrades & Enhancements
- WTP-WQL Network Equipment

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the information technology projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects. Results of this year's prioritization process and financial analysis are summarized in Appendix B. Funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2016-17.

Information Technology Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
73274010	Boardroom Technology Upgrade	-	-	-	818	-	-	-	-	-	818
73274009	Data Consolidation	336	325	440	279	270	-	-	-	-	1,210
73274011	E-Discovery Management System	-	5	-	545	-	-	-	-	-	550
73274001	IT Disaster Recovery	562	1,393	1	441	-	-	-	-	-	2,396
60274062s	PeopleSoft System Upgrade & Expansion	5,662	2,415	2,578	7,320	3,061	-	-	-	-	18,458
73274008	Software Upgrades & Enhancements	1,224	9	6	670	786	846	965	438	13,591	18,529
95274003	WTP-WQL Network Equipment	740	180	20	1,301	555	198	-	103	9,777	12,854
	TOTAL	8,524	4,327	3,045	11,374	4,672	1,044	965	541	23,368	54,815

FY 2016-17 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology – Funding Sources ($K)

Information Technology - Funding Sources ($K)

Fund Number	FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
61	Water Utility Enterprise Fund	740	180	20	1,301	555	198	-	103	9,777	12,854
11	General Fund	1,199	-	-	-	-	-	-	-	-	1,199
73	Information Technology Fund	6,585	4,147	3,025	10,073	4,117	846	965	438	13,591	40,762
	TOTAL	8,524	4,327	3,045	11,374	4,672	1,044	965	541	23,368	54,815

FY 2016-17 Funds to be reappropriated

Project **Boardroom Technology Upgrades**
Program Information Technology
District Contact Sudhanshu Tikekar STikekar@valleywater.org

Priority No. 44
Project No. 73274010



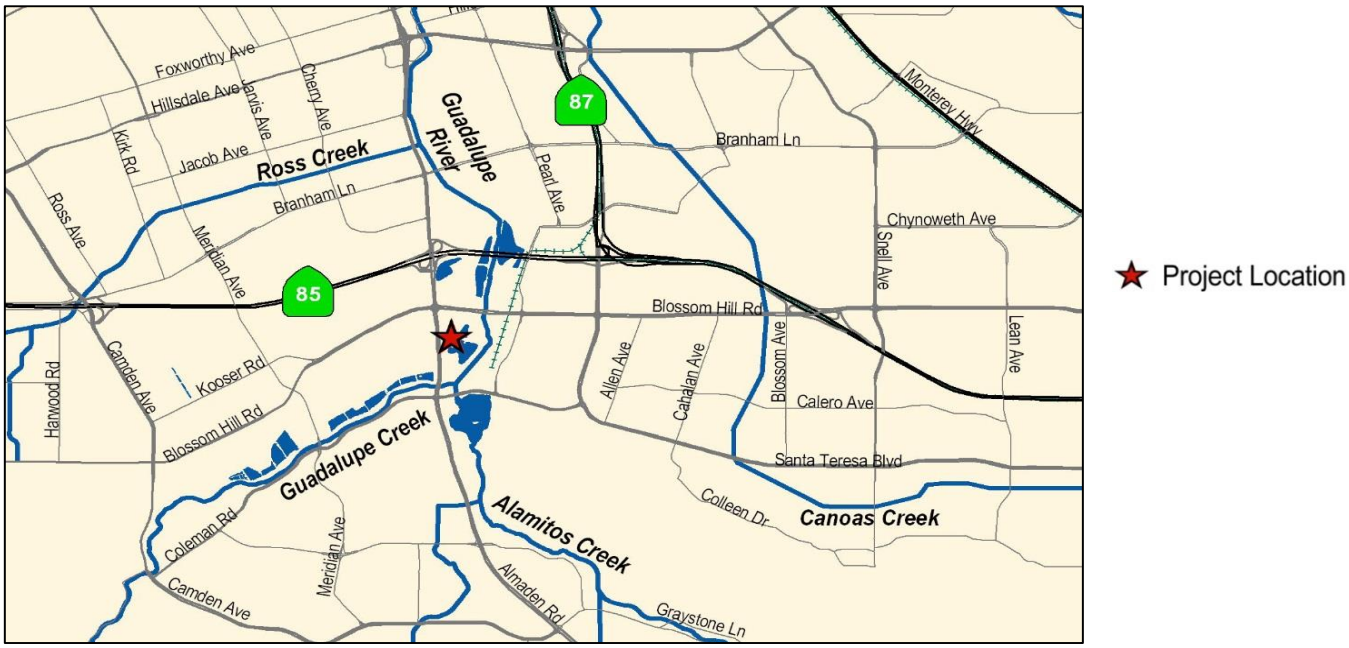
Santa Clara Valley Water District Boardroom Dais

PROJECT DESCRIPTION

This project plans, designs, and implements a system to replace the 17-year old audio visual system which is now at its end-of-life by converting from an analog-based system to high-definition digital broadcasting in order to accomplish the following objectives:

- Align with current technology by replacing the Analog Video Broadcast system with High-Definition Broadcasting.
- Provide an easy-to-operate user-friendly system with enhanced capabilities for persons with disabilities.
- Provide an enhanced viewer experience.
- Implement a system supported by AV vendors.
- Create a media-friendly, and reliable system that facilitates presentations for meetings.

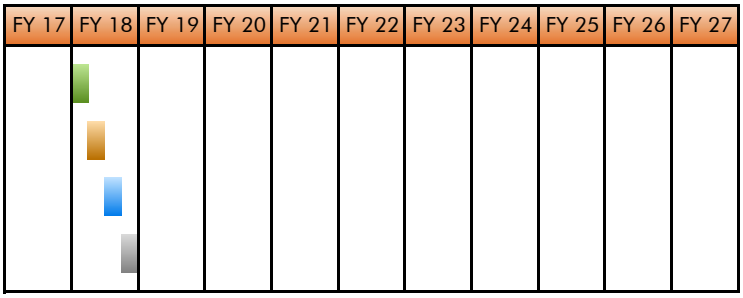
PROJECT LOCATION



SCHEDULE & STATUS

July 2017 to June 2018

Phase	Cost
Plan	-
Design	-
Construct	818
Closeout	-
	818



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274010-Boardroom Technology Upgrades	0	0	818	0	0	0	0	0	818
with inflation	0	0	818	0	0	0	0	0	818

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274010-Boardroom Technology Upgrades	0	0	0	818	0	0	0	0	0	818

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	818
Other Funding Sources	0
Total	**818**

OPERATING COST IMPACTS

Operating costs will be provided after completion of the planning phase.

USEFUL LIFE: Not Available

Project	**Data Consolidation**
Program	Information Technology
Priority No.	34
Project No.	73274009
District Contact	Sudhanshu Tikekar STikekar@valleywater.org

No Photo is provided for this project.

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data Consolidation to accomplish the following objectives:

- Implement a Enterprise Content Management system with strong Business Intelligence.
- Move from a applications centric model (current) to a data centric model thereby removing silos of data stores.
- Information management for big data. Manage data as a strategic, core asset, with ongoing process and management control for big data analytics.
- High-Performance analytics for big data. Gain rapid insights from big data and the ability to solve increasingly complex business problems.
- Reduce the overall data footprint. Identify duplicate, and unstructured data and delete it.

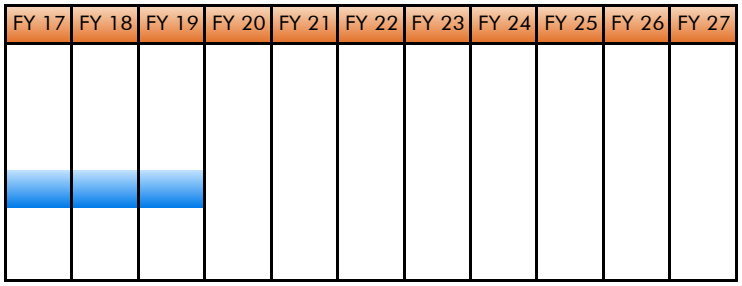
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost
Plan	-
Design	-
Construct	1,190
Closeout	-
	1,190



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274009-Data Consolidation	21	200	719	250	0	0	0	0	1,190
with inflation	21	200	719	270	0	0	0	0	1,210

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274009-Data Consolidation	336	325	440	279	270	0	0	0	0	1,210

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	1,210
Other Funding Sources	0
Total	**1,210**

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**E-Discovery Management System**
Program	Information Technology
Priority No.	56
Project No.	73274011
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



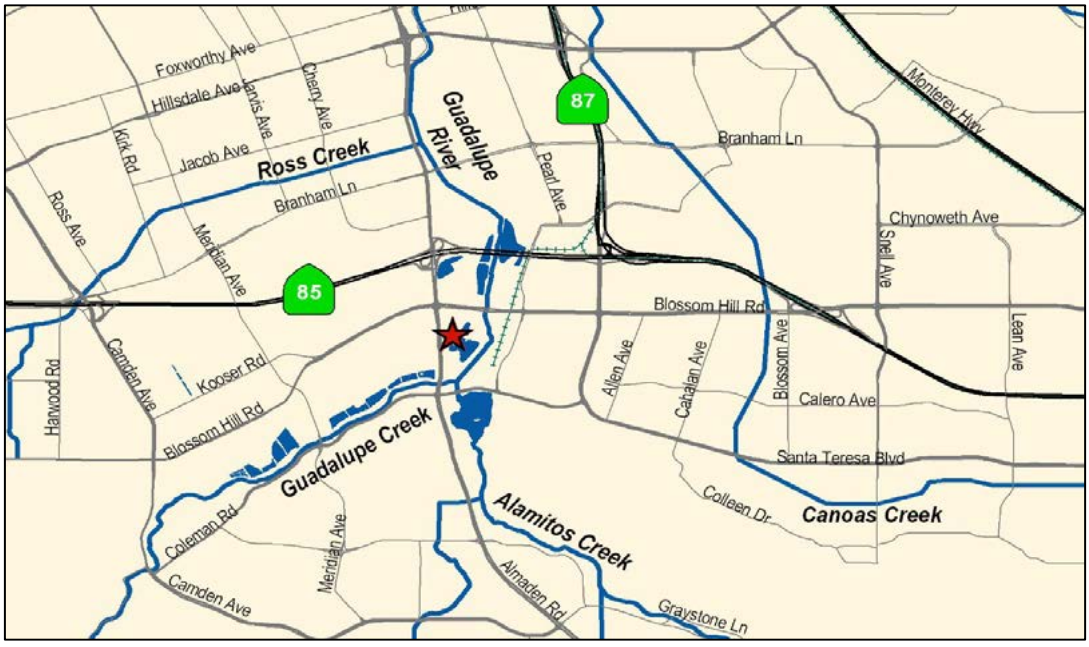
Screenshot of the SCVWD Public Records web page

PROJECT DESCRIPTION

This project plans, designs, and implements a software solution to accomplish the following objectives:

- Issue formal notification of litigation holds.
- Search and locate/identify electronically stored information (ESI).
- Collect, preserve, process, review, and analyze ESI.
- Produce ESI in context to litigation, in response to California Public Records Act (CPRA) requests, and other government investigations.

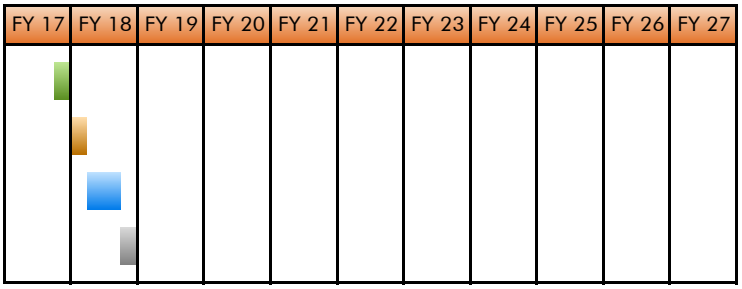
PROJECT LOCATION



SCHEDULE & STATUS

April 2017 to June 2018

Phase	Cost
Plan	-
Design	-
Construct	550
Closeout	-
	550



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
73274011-E-Discovery Management System	0	5	545	0	0	0	0	0	550
with inflation	0	5	545	0	0	0	0	0	550

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
73274011-E-Discovery Management System	0	5	0	545	0	0	0	0	0	550

Adjusted Budget includes adopted budget plus a planned budget adjustment of $5,000.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	550
Other Funding Sources	0
Total	**550**

OPERATING COST IMPACTS

Operation cost impacts will be provided after completion of the planning phase.

USEFUL LIFE:

Not available

Project	**Information Technology Disaster Recovery**
Program	Information Technology
Priority No.	46
Project No.	73274001
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



Existing Data Center that houses critical servers supporting the District's normal operations

PROJECT DESCRIPTION

This project plans and designs improvements to Information Technology to accomplish the following objectives:

- Enable coordinated, rapid recovery from a disaster.
- Reduce the District's business risk exposure.

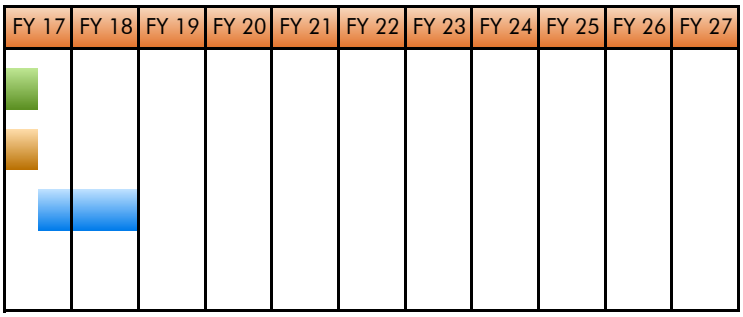
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to December 2018

Phase	Cost
Plan	-
Design	-
Construct	2,370
Closeout	-
	2,370



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
73274001-Information Technology Disaster Recovery	49	1,905	442	0	0	0	0	0	2,396
with inflation	49	1,905	442	0	0	0	0	0	2,396

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
73274001-Information Technology Disaster Recovery	562	1,393	1	441	0	0	0	0	0	2,396

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	2,396
Other Funding Sources	0
Total	**2,396**

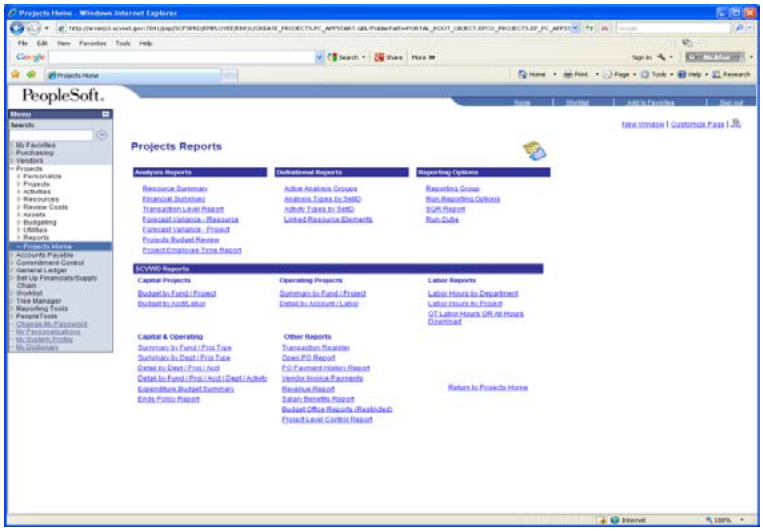
OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE:

Not Available

Project	**PeopleSoft System Upgrade and Expansion**
Program	Information Technology
Priority No.	63
Project No.	60274062s
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



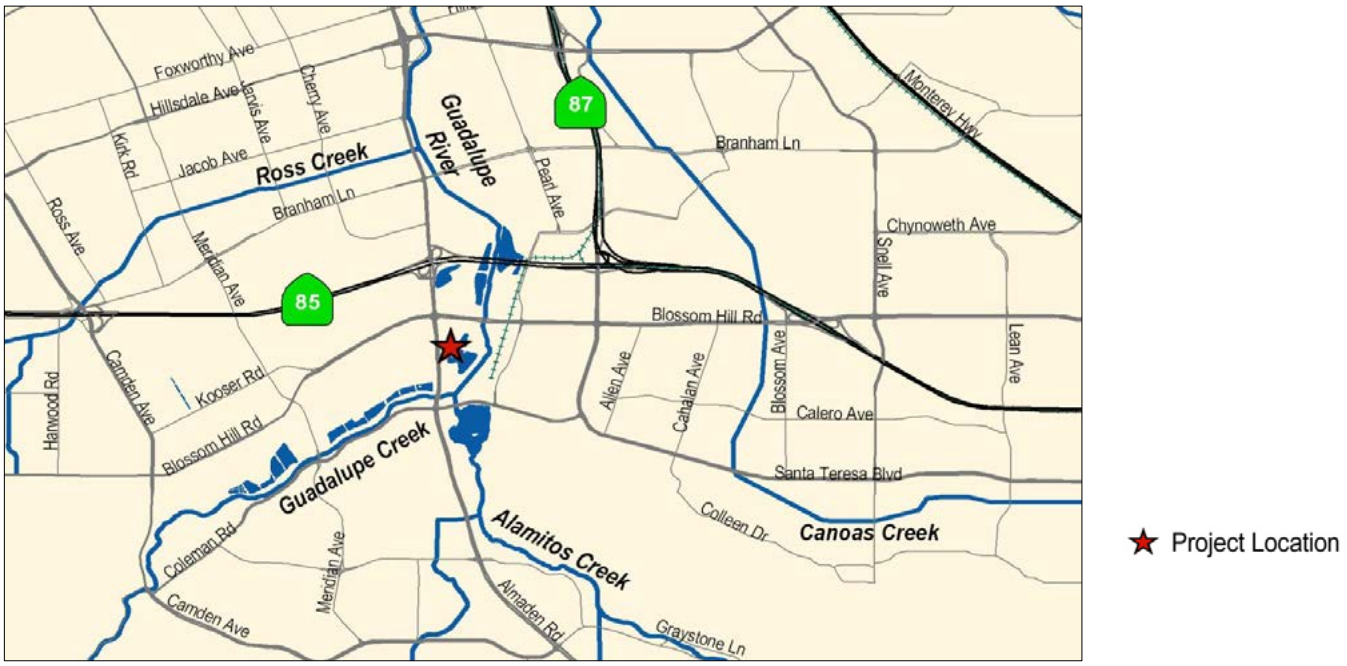
PeopleSoft Reports page from the District's intranet

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the existing PeopleSoft system in order to accomplish the following objectives:

- Ensure the District has a current and functionally robust enterprise resource planning (ERP) solution, incorporating finance/human resource, timekeeping, planning and budgeting, and procurement functionality.
- Fully automate the District's financial and human resources management functions.
- Automate the tracking and reporting of the District's labor effort and employee leave.
- Automatically apply the District's business rules to employee time records.

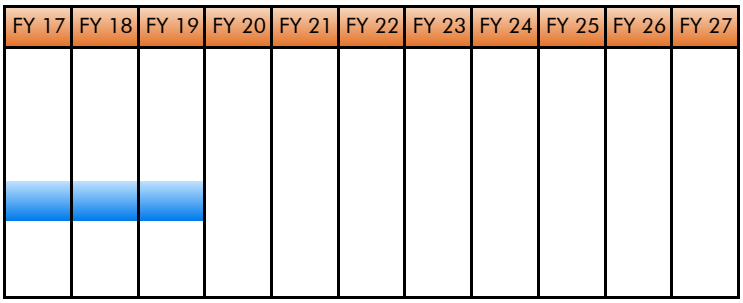
PROJECT LOCATION



SCHEDULE & STATUS

July 2013 to June 2019

Phase	Cost
Plan	-
Design	-
Construct	18,227
Closeout	-
	18,227



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	1,884	2,416	9,898	2,830	0	0	0	0	17,028
with inflation	1,884	2,416	9,898	3,061	0	0	0	0	17,259
TOTAL	3,083	2,416	9,898	2,830	0	0	0	0	18,227
with inflation	3,083	2,416	9,898	3,061	0	0	0	0	18,458

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY16**	**FY17**		**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**Future**	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	4,463	2,415	2,578	7,320	3,061	0	0	0	0	17,259
TOTAL	5,662	2,415	2,578	7,320	3,061	0	0	0	0	18,458

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	17,259
Total	**18,458**

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be needed for expanded technical support for new system modules and features and to continue with operational refinements, enhancements, integrations, report development, etc. on an on-going annual basis. PeopleSoft software maintenance fees are required on an annual recurring basis and projected to increase by three percent each year. The projected annual software maintenance fee for FY 2019 is approximately $164,324.

USEFUL LIFE: 5 Years

Project	**Software Upgrades & Enhancements**
Program	Information Technology
Priority No.	54
Project No.	73274008
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



Existing District Systems to be upgraded and enahanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing District systems including GIS, Maximo, Oracle Development system, internal and external District websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate upgrade activities into a single project for better organization, planning and budgeting purposes (the exception is Peoplesoft which has its own upgrade project).

The objective of this project is to regularly upgrade existing software packages to:

- Reduce current risks associated with being on a software version that is no longer supported by the vendor and is running on outdated operating systems.
- Increase the level of service provided by the software with new functionalities.

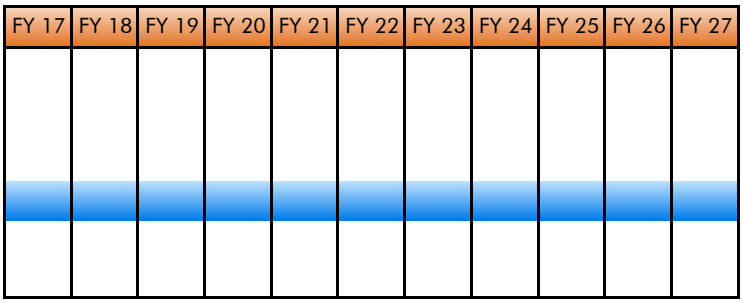
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2031

Phase	Cost
Plan	-
Design	-
Construct	13,669
Closeout	-
	13,669



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
73274008-Software Upgrades & Enhancements	701	526	611	792	752	825	360	9,160	13,727
with inflation	701	526	611	857	846	965	438	13,591	18,534

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
73274008-Software Upgrades & Enhancements	1,224	9	6	605	857	846	965	438	13,591	18,534

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	18,534
Other Funding Sources	0
Total	**18,534**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**WTP-WQL Network Equipment**
Program	Information Technology
Priority No.	46
Project No.	95274003
District Contact	Sudhanshu Tikekar STikekar@valleywater.org



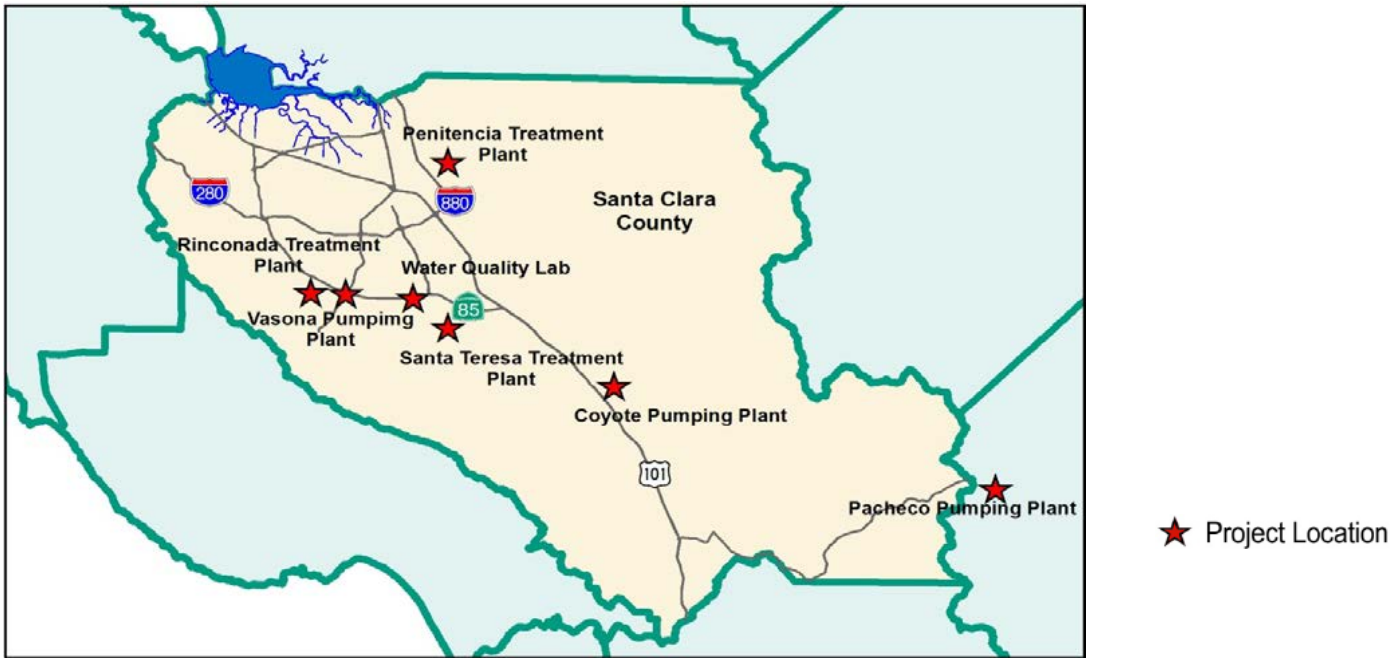
View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that the District has a current and robust computer network to accomplish the following objectives:

- Deliver greater access speeds.
- Restore vendor maintenance.
- Improve software application performance.
- Provide a path to meet future data communications needs.

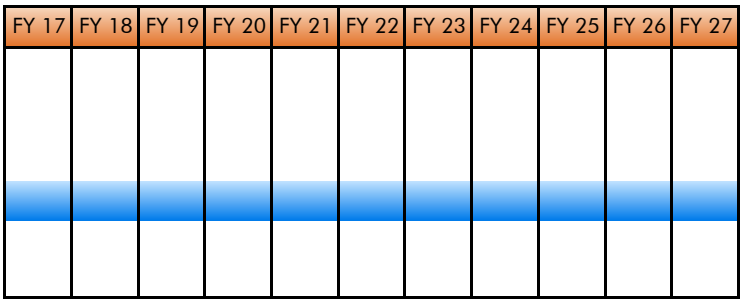
PROJECT LOCATION



SCHEDULE & STATUS

July 2014 to June 2032

Phase	Cost
Plan	-
Design	-
Construct	9,918
Closeout	-
	9,918



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Future	
95274003-WTP-WQL Network Equipment	708	192	1,321	513	176	0	85	6,923	9,918
with inflation	708	192	1,321	555	198	0	103	9,777	12,855

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY16	FY17		FY18	FY19	FY20	FY21	FY22	Future	
95274003-WTP-WQL Network Equipment	740	180	20	1,301	555	198	0	103	9,777	12,855

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	12,855
Other Funding Sources	0
Total	12,855

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by $37,000 beginning in FY 2033 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years

Financial Planning and Summary

CIP FINANCIAL PLANNING

Board policy regarding financial planning and budgeting provides the foundation for CIP financial planning. The policy states:

Executive Limitation EL-4, "Financial planning for any fiscal year shall be aligned with the Board's Ends, not risk fiscal jeopardy, and be derived from a multi-year plan."

> Executive Limitation EL-4.3, "A BAO shall include credible projection of revenues and expenses, separation of capital and operational items, cash flow, and disclosure of planning assumptions."

> Executive Limitation EL-4.4, "A BAO shall plan the expenditure in any budget period within the funds that are conservatively projected to be received or appropriated from reserves in that period."

KEY REVENUES SOURCES

Water Charges

- Water charges include a ground water production charge, which is equivalent to the basic user charge, and is associated with the benefit of managing groundwater supplies. The groundwater charge is applied to water extracted from the groundwater basin in Zones W-2 and W-5. The basic user charge is applied to other types of water delivered by the District. There are two rates: one for agricultural water and one for municipal and industrial water.

- A treated water surcharge, which is associated with the benefit of receiving treated water, is levied in addition to the basic user charge on water delivered from the District's water treatment plants.

Property Tax

Santa Clara County allocates property tax revenue to the District from ad valorem taxes levied on land within the county.

Special Parcel Tax

A special parcel tax, with a 2016 sunset, was approved by the voters in Santa Clara County in November 2000. This revenue source was restricted to financing the costs of the District's Clean, Safe Creeks and Natural Flood Protection Program. In November 2012 the special parcel tax was continued by voter approval to 2028. This revenue can be used for both the continuing Clean, Safe Creeks and new Safe, Clean Water programs.

Benefit Assessments

Benefit assessment revenue consists of levies approved by voters in 1986 and 1990 to support financing for flood control capital improvements. The current FY 2015-16 budget amount is approximately 1.25 times the duly authorized annual debt service requirements for each Watershed.

Capital Reimbursements

Capital reimbursement revenues are from local, state and federal partners for capital projects carried on cooperatively by the District and its partners. The District fronts the partners' shares of capital expenditures and receives reimbursements from the partners at a later time.

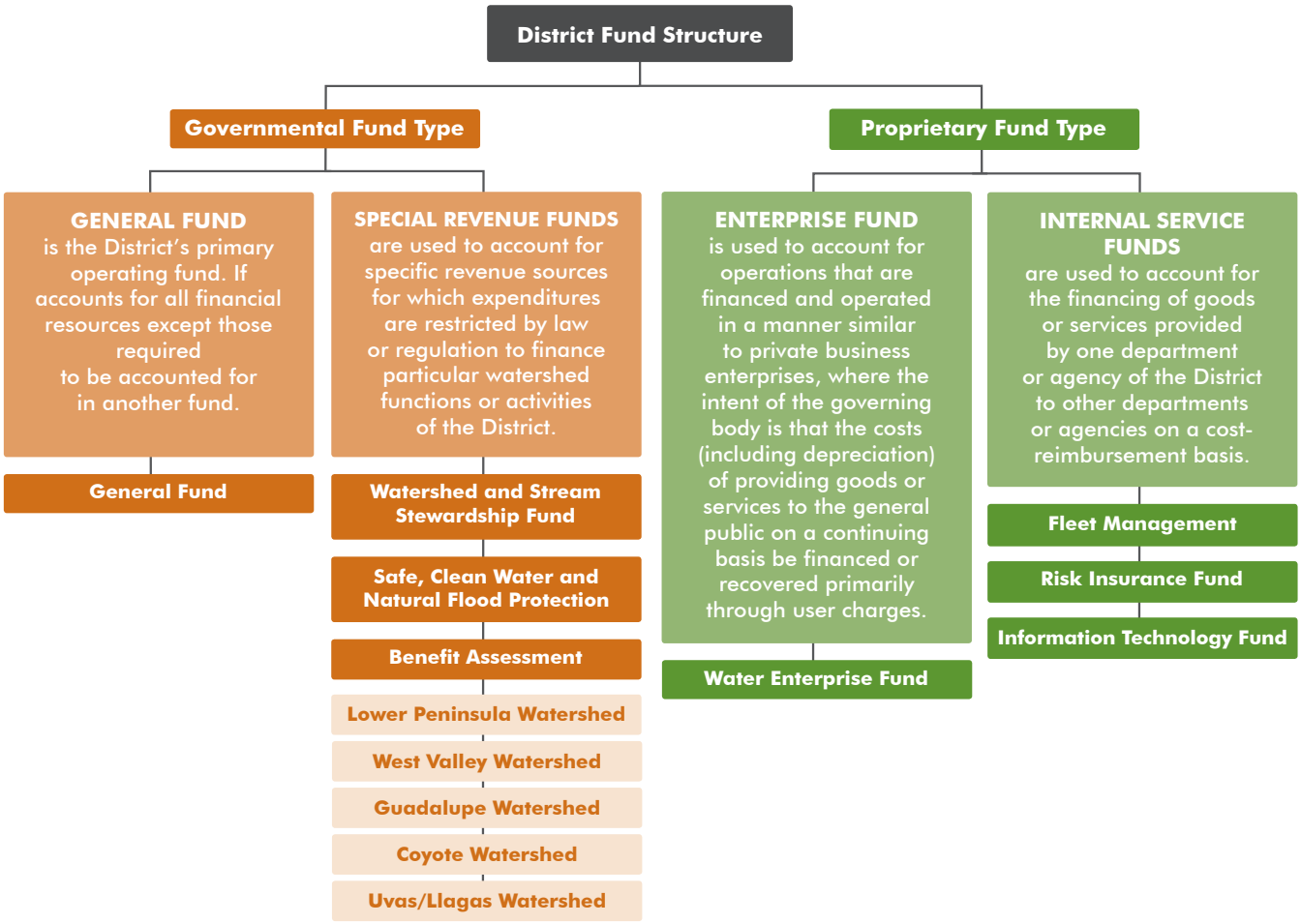
Interest

Interest is earned from the District's investment portfolio.

Financial Planning and Summary

District Fund Structure

The District's revenue sources are organized into eight funds. Each fund has specific revenue sources according to their intended purposes, and each fund is an independent accounting entity with a self-balancing set of accounts comprised of its assets, liabilities, fund equity, revenue, and expenditures or expenses, as appropriate.



Revenue by Fund ($K)

FUND NAME	FY16 Budget	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Water Utility Enterprise	194,441	243,930	254,930	290,801	330,880	381,121	420,647	465,416	509,886	551,264	574,523
Watershed Stream Stewardship	73,916	90,137	103,362	82,849	80,380	83,272	86,403	89,702	93,182	97,000	101,207
Safe, Clean Water and Natural Flood Protection	44,007	59,290	62,568	74,011	54,291	50,152	49,645	51,240	53,094	54,956	56,805
Benefit Assessment	14,683	14,785	14,778	14,778	13,447	13,458	13,457	13,448	13,443	6,850	6,855
General	7,377	6,708	7,123	7,344	7,602	7,869	8,145	8,431	8,728	9,034	9,351
Internal Service	228	230	233	236	244	256	263	276	289	299	309
TOTAL	334,652	415,079	442,994	470,018	486,844	536,128	578,561	628,512	678,622	719,404	749,050

Note: Internal Service Funds (ISF) is the combination of the Fleet Management, IT Capital, and Risk Funds

Financial Planning and Summary

Revenue Projections

The District regularly updates the projected revenues based on the best information available.

- Revenues from water charges are estimated based on projections of water demand for residential, commercial and industrial, and agricultural consumption combined with rates per acre-foot. Rates are set at a level that will provide revenue needed to meet operating and capital needs.
- Revenues from property taxes, special parcel taxes, and benefit assessments are estimated based on projection of growth in assessed value and number of developed parcels in Santa Clara County.
- Interest earnings are estimated based on the projected average cash balances during the fiscal year and expected yield from the District's investment portfolio.
- Revenue from capital reimbursements partnerships are estimated based on the terms of agreements executed by the District and its partners.

Expenditure Projections

The District regularly updates the operation and capital expenditures based on the best information available.

Each capital project cost estimate includes the yearly expenditures through completion based on the project's scope and schedule. The expenditures are monitored regularly and updated when necessary, e.g. expenditures are updated when a project's scope changes. A management review process is enforced to ensure only justified expenditure changes are approved.

Operation cost projections for the next 15 years are updated annually and are based on assumptions derived from the District's strategic plans, including the impact of completed capital projects. Capital and operations expenditure projections are the foundation for the development of the District's budget.

Financial Analysis

The District regularly performs financial analysis to comply with the Board's Financial Planning/Budgeting Policy. The District uses sophisticated financial models to perform the analysis for each fund. The projected operation expenditures, capital expenditures, and revenues for the next ten years are incorporated into the financial models to analyze the health of each fund under various economic scenarios. This process assures that funds will be available when needed to implement the CIP.

The financial analysis generates alternatives for funding capital projects based on the available yearly revenues, from all sources, allocated to the capital program, and the debt financing capacity of each fund. The financial analysis establishes the parameters within which the capital project schedule is developed.

Debt Projections and Debt Ratios

Debt is managed at the District depending on the type of District business involved. The SCW program approved by the voters in 2012 includes the authority to issue debt against future revenue in order to accelerate completion of projects sooner. Debt service on outstanding benefit assessment debt is funded by benefit assessments levied on property owners in the county.

The water utility business, on the other hand, uses a combination of short-term and long-term debt financing in conjunction with pay-as-you-go financing to lessen impacts to the water rate caused by fluctuations in capital funding needs. In the 1984 general election, Measure B was passed by the voters, which gave the District's water utility the authority to issue bonds on an "as required" basis. Debt service on outstanding debt is paid from water revenues. Bond covenants stipulate that the District must maintain a 1.25 debt coverage ratio on all parity bonds. The long-term financial analysis targets a debt coverage ratio of 2.0, which helps establish the parameters for capital planning that ensure bond covenants will be met.

The District currently enjoys credit ratings that are among the highest for a water-related governmental entity in the state of California, which helps keep interest costs borne by the District at a minimum.

Relationship between the Operating Budget and CIP

Whenever the District commits to capital improvements, there is a potential for associated long-range commitment of operating funds. For example, if 20-year bonds are issued to finance capital needs, then the operating funds will need to budget debt service payments for the next two decades. For this reason, it is important to evaluate capital commitments in the context of their long-range operating impact.

In addition to the long-range debt service payments, some capital projects affect future operating budgets either positively or negatively due to an increase or decrease in maintenance and operation costs. Such impacts vary widely from project to project and, are evaluated individually during the project development stage. The District is committing to a potential change in the operating budget when a capital project is approved.

The projected debt service payments and the positive or negative operating budget impacts are important factors considered in the District's financial analysis.

This chart identifies the operating budget impacts to each fund from projected debt service payments. The debt service payment in the Watershed Stream Stewardship Fund is a total of payments associated with each individual watershed.

Debt Payment Schedule ($K)

Fund	FY17	FY18	FY19	FY20	FY21	FY22
General Fund	533	533	533	534	534	531
Benefit Assessment Fund	12,208	12,162	12,162	11,085	11,094	11,090
Safe, Clean Water and Natural Flood Protection Fund	296	300	5,897	7,020	7,020	19,215
Water Utility Enterprise Fund	26,482	37,083	46,350	62,000	88,005	106,802
Information Technology Fund	-	-	-	-	-	-
TOTAL	39,520	50,078	64,942	80,640	106,653	

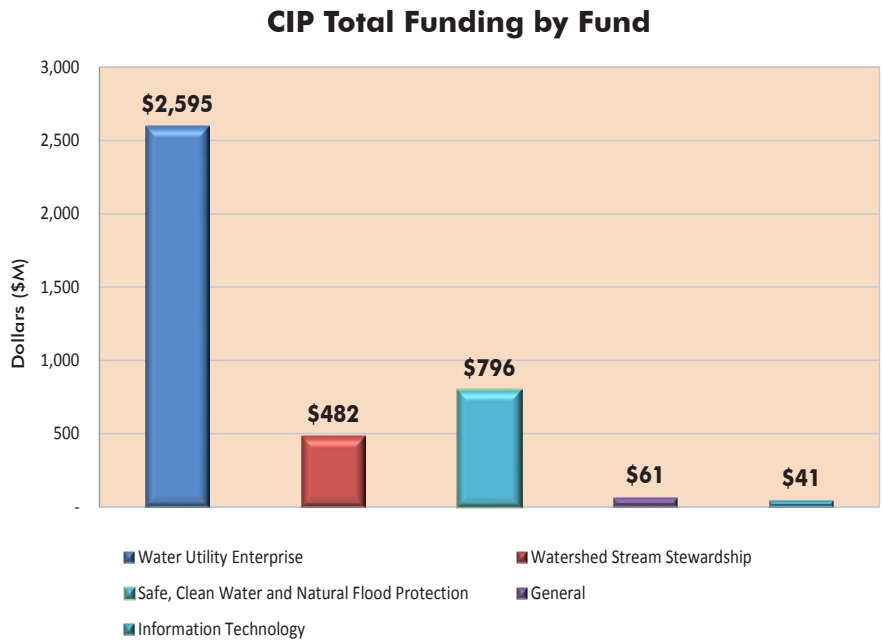
This chart identifies the net operating budget impacts to each fund resulting from annual maintenance and/or operating cost for newly completed capital projects. Additional information regarding operating impacts related to individual projects can be found on the project pages.

Estimated Operating Impacts ($K)

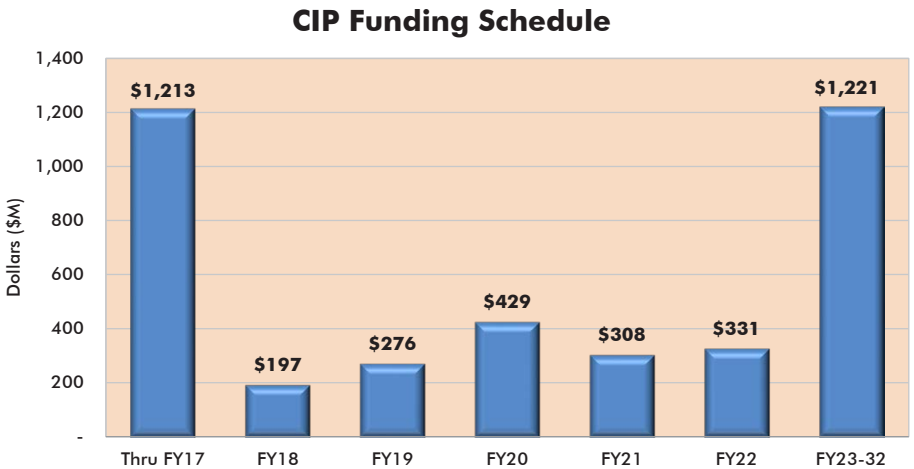
Fund	FY17	FY18	FY19	FY20	FY21	BEYOND
General Fund	-	-	-	-	-	-
Watershed Stream Stewardship Fund	35	35	4,035	35	60	70
Safe, Clean Water and Natural Flood Protection Fund	-	-	50	150	150	730
Water Utility Enterprise Fund	1,000	1,050	1,058	858	796	2,383
Information Technology Fund	-	164	169	174	179	184
TOTAL	1,035	1,249	5,312	1,217	1,185	3,367

CIP FUNDING SUMMARY

Of the $3.975 billion in total District funding for current and future projects, the Board appropriated $1.213 billion in prior years through June 30, 2017 (the end of Fiscal Year 2016-17). This year's CIP process identified additional funding needs of $2.762 billion to complete the projects in the CIP, with $197 million allocated in Fiscal Year 2017-18 and a total of $2.565 billion proposed for future years.



The needed $3.975 billion to implement the 66 projects as defined in the CIP are funded by four of the District's seven Funds.



The following chart shows the funding schedule for the $3.975 billion to implement the 66 projects.

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Almaden Dam Improvements	10,038	2,621	-	520	541	562	538	27,590	17,184	59,594
Anderson Dam Seismic Retrofit (C1)	30,836	750	-	7,913	3,203	147,292	83,915	107,297	63,341	444,547
Calero and Guadalupe Dams Seismic Retrofits	17,533	9,267	2,901	3,349	26,942	67,955	27,036	7,533	-	159,615
Coyote Pumping Plant ASD Replacement	-	-	-	536	1,994	9,001	4,720	-	-	16,251
Coyote Warehouse	713	2,227	2,156	2,904	546	-	-	-	-	6,390
Dam Seismic Stability Evaluation	18,812	-	1,071	-	-	496	468	-	-	19,776
Small Capital Improvements, San Felipe Reach 1-3	n/a	3,608	-	2,457	1,294	-	726	94	24,905	33,084
10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	15,965	20,157	11,474	4,502	8,231	36,899	97,228
FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
Pacheco Conduit Inspection and Rehabilitation	1,500	5,434	3,625	97	-	-	-	-	-	7,031
Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	719	505	251	2,389	317	-	-	-	4,818
Penitencia Delivery Main/Force Main Seismic Retrofit	24,940	9,647	-	674	-	-	-	-	-	35,261
SCADA Remote Architecture & Communications Upgrade	402	374	292	186	188	180	936	852	3,909	7,027
Small Capital Improvements, Raw Water Transmission	n/a	-	-	321	75	51	-	94	3,213	3,754
Small Capital Improvements, Treated Water Transmission	n/a	-	-	-	144	-	-	-	-	144
Vasona Pumping Plant Upgrade	-	119	69	712	691	1,642	17,673	85	-	20,922
Fluoridation at WTPs	6,875	3,009	56	277	-	-	-	-	-	10,161
IRP2 WTP Ops Bldgs Seismic Retrofit	20,992	1,167	-	346	-	-	-	-	-	22,505
PWTP Clearwell Recoating & Repair	5,919	550	297	-	-	-	-	-	-	6,469
PWTP Residuals Management	-	-	-	-	703	1,462	7,835	-	-	10,000
RWTP FRP Residuals Management Modifications	26,096	5,403	-	17,054	2,760	403	-	-	-	51,716
RWTP Reliability Improvement	71,509	45,178	-	48,144	47,524	47,961	30,421	146	-	290,883
RWTP Treated Water Valves Upgrade	8,369	191	-	170	187	22	-	-	-	8,939
Small Capital Improvements, Water Treatment	n/a	3,216	-	2,512	6,444	7,565	7,875	3,950	17,154	48,716
Expedited Purified Water Program (EPWP)	18,482	9,669	8,891	-	-	15,422	25,309	108,789	461,299	638,970
Long-Term Purified Water Program Elements	-	-	-	-	-	-	-	-	355,300	355,300
South County Recycled Water Pipeline	27,784	15,772	19,030	-	72	3,071	227	-	-	46,926

FY 2016-17 Funds to be reappropriated

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K) (cont'd)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Wolfe Road Recycled Water Pipeline	14,171	657	142	198	-	-	-	-	-	15,026
FAHCE Stevens Creek Fish Passage Enhancement - 90%	765	-	-	-	1,410	2,848	-	-	-	5,023
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
WTP-WQL Network Equipment	740	180	20	1,301	555	198	-	103	9,777	12,854
TOTAL	307,618	119,758	39,055	105,887	123,282	323,050	227,647	280,256	1,107,476	2,594,974

FY 2016-17 Funds to be reappropriated

Project Funding Schedule for Watershed and Stream Stewardship Fund ($K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Palo Alto Flood Basin Tide Gate Structure Improvements	1,200	-	234	458	-	-	-	-	-	1,658
Permanente Creek, SF Bay to Foothill Expressway	17,541	-	178	-	-	-	-	-	-	17,541
San Francisquito Creek, SF Bay thru Searsville Dam	4,064	-	-	-	-	-	-	-	-	4,064
San Francisquito Creek, Early Implementation	1,614	-	-	-	-	-	-	-	-	1,614
San Tomas Creek, Quito Road Bridge Replacement	563	-	1	124	-	-	-	-	-	687
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	82,417	27,176	7,468	-	20,014	2,441	2,447	426	-	134,921
Cunningham Flood Detention Certification	4,458	3,829	534	1,674	649	124	-	-	-	10,734
Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	6,800	2,801	1,781	4,815	12,252	562	292	304	215	28,041
Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	96,788	2,471	348	1,981	589	320	-	-	-	102,149
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps	8,970	-	119	-	-	-	-	-	-	8,970
Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs	8,544	-	3,709	-	-	-	-	-	-	8,544
Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	2,475	-	-	2,014	3,245	2,927	127	15,359
Llagas Creek–Upper, R5,6,&7b	-	-	-	-	17,000	6,000	-	-	-	23,000
San Francisco Bay Shoreline	14,067	1,497	-	2,721	-	-	-	-	-	18,285
San Francisco Bay Shoreline - Contribution	490	-	-	-	-	-	-	-	-	490
Shoreline Early Implementation	359	-	-	-	-	-	-	-	-	359
Watersheds Asset Rehabilitation Program	2,728	787	608	11,047	4,073	1,999	10,786	14,701	20,730	66,851
SMP Mitigation, Stream and Watershed Land Preservation	15,714	510	1	509	-	-	-	-	-	16,733
FAHCE Stevens Creek Fish Passage Enhancement - 10%	85	-	-	-	157	316	-	-	-	558
Salt Ponds A5-11 Restoration	2,518	1,715	-	754	1,838	1,680	-	-	-	8,505
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
Watershed Habitat Enhancement Studies	-	90	-	1,167	1,119	-	-	-	-	2,376
TOTAL	275,966	40,876	17,456	25,250	58,415	16,205	17,545	19,160	28,958	482,375

FY 2016-17 Funds to be reappropriated

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund ($K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
IRP2 Additional Line Valves (A3)	-	-	-	-	-	1,046	1,314	9,244	192	11,796
Main & Madrone Pipelines Restoration (A1)	1,807	981	-	14,617	302	-	-	-	-	17,707
Permanente Creek, SF Bay to Foothill Expressway	45,028	12,105	-	16,906	1,028	-	-	-	-	75,067
San Francisquito Creek, SF Bay thru Searsville Dam (E5)	6,782	-	457	-	-	-	-	-	-	6,782
San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)	32,422	536	118	7,338	5,224	997	-	-	-	46,517
Sunnyvale East and West Channels	26,177	-	10,705	4,931	18,831	18,303	117	122	-	68,481
Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	112,881	8,615	21,446	6,544	22,503	18,736	8,222	3,529	3,021	184,051
Berryessa Creek, Calaveras Boulevard to Interstate 680	45,403	14,747	5,812	-	-	-	-	-	-	60,150
Coyote Creek, Montague Expressway to Interstate 280	11,486	-	632	-	-	-	1,021	852	23,227	36,586
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)	385	-	385	-	10,536	6,134	15,232	8,650	8,412	49,349
Llagas Creek–Upper, Reimbursable (E6b)	42,632	319	11,958	106	-	-	-	-	-	43,057
Llagas Creek–Upper, Corps Coordination (E6a)	40,893	-	30,384	-	8,635	18,000	12,600	122	127	80,377
Llagas Creek–Upper, Technical Studies	1,446	-	-	-	-	-	-	-	-	1,446
Llagas Creek–Upper, Design	19,581	2,034	-	1,040	270	281	292	304	316	24,118
San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)	6,548	6,247	7,324	-	2,913	3,619	3,264	-	-	22,591
San Francisco Bay Shoreline - Other EIAs Planning (E7)	3,334	422	1,714	-	-	924	1,170	730	-	6,580
Hale Creek Enhancement Pilot Study (D6)	463	482	268	1,306	2,673	-	-	-	-	4,924
Almaden Lake Improvements (D4.1a)	2,665	1,044	560	654	297	-	-	-	-	4,660
SCW Fish Passage Improvements (D4.3; Bolsa Road)	1,461	2,203	215	222	2,415	-	-	-	-	6,301
SCW Implementation Fund, Creek Bank Stability (D6.1)	-	-	-	-	290	1,184	218	-	-	1,692
SCW Implementation Fund, Ogier Ponds Separation from Coyote Creek (D4.1b)	-	-	-	-	4,277	4,540	6,210	-	-	15,027
Ogier Ponds Separation from Coyote Creek (D4.1b)	-	-	-	-	2,518	8,560	2,307	-	-	13,385
SCW Implementation Fund, Regionally Significant Habitat Land Acquisition (D7)	-	-	-	-	724	749	775	802	7,886	10,936
South Bay Salt Ponds Restoration (D8)	535	-	49	13	3,564	-	-	-	-	4,112
TOTAL	401,929	49,735	92,027	53,677	87,000	83,073	52,742	24,355	43,181	795,692

FY 2016-17 Funds to be reappropriated

Financial Planning and Summary

Project Funding Schedule for General Fund ($K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Almaden and Winfield Campus, Small Capital Improvements	n/a	2,062	-	1,690	2,126	2,192	2,260	2,324	27,526	40,180
Headquarters Operations Building	1,176	-	1,151	-	1,002	3,825	6,949	4,867	-	17,819
Winfield Capital Improvements	1,726	325	-	-	-	-	-	-	-	2,051
PeopleSoft System Upgrade & Expansion	1,199	-	-	-	-	-	-	-	-	1,199
TOTAL	4,101	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	61,249

FY 2016-17 Funds to be reappropriated

Project Funding Schedule for Information Technology Fund ($K)

PROJECT NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Boardroom Technology Upgrade	-	-	-	818	-	-	-	-	-	818
Data Consolidation	336	325	440	279	270	-	-	-	-	1,210
E-Discovery Management System	-	5	-	545	-	-	-	-	-	550
IT Disaster Recovery	562	1,393	1	441	-	-	-	-	-	2,396
PeopleSoft System Upgrade & Expansion	4,463	2,415	2,578	7,320	3,061	-	-	-	-	17,259
Software Upgrades & Enhancements	1,224	9	6	670	786	846	965	438	13,591	18,529
TOTAL	6,585	4,147	3,025	10,073	4,117	846	965	438	13,591	40,762

FY 2016-17 Funds to be reappropriated

CIP Funding Schedule Summary for All Funds ($K)

FUND NAME	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
Water Utility Enterprise	307,618	119,758	39,055	105,887	123,282	323,050	227,647	280,256	1,107,476	2,594,974
Watershed Stream Stewardship	275,966	40,876	17,456	25,250	58,415	16,205	17,545	19,160	28,958	482,375
Safe, Clean Water and Natural Flood Protection	401,929	49,735	92,027	53,677	87,000	83,073	52,742	24,355	43,181	795,692
General	4,101	2,387	1,151	1,690	3,128	6,017	9,209	7,191	27,526	61,249
Information Technology	6,585	4,147	3,025	10,073	4,117	846	965	438	13,591	40,762
TOTAL	996,199	216,903	152,714	196,577	275,942	429,191	308,108	331,399	1,220,732	3,975,051

FY 2016-17 Funds to be reappropriated

Appendix A - CIP Priority Criteria

WATER SUPPLY CAPITAL PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (75%)

Water Supply (E 2) — 0

	I	P	
A1	☐	☐	Project maintains existing water utility infrastructure or is required to meet the current and future water supply demand, comply with water quality standards or meet other regulatory requirements. **I = Impact (H, M, L); P = Probability (H, M, L)**
A2	☐	☐	Project expands water utility infrastructure or provides additional water supply to meet current or near future demand. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project increases water supply portfolio, increases operation flexibility, improves maintenance capabilities, adds efficiency, or improves post-disaster reliability of water utility infrastructure [Example: improving the systematic reliability of water utility infrastructure to continually perform during and after a devastating event; improving the systematic flexibility of water utility infrastructure to utilize various source water; or adding redundancy so infrastructure can be taken off-line for maintenance]. **(H, M, L)**
C	☐		Timing of when project is needed to meet water supply demands, water quality standards, or other regulations. **(I = Immediately (0-3 yrs.); S = Short-term (3-5 yrs.); L = Long-term (5+ yrs.))**

COMMUNITY ENGAGEMENT (7.5%)

Social Factor - Check if applicable — 0

- ☐ Promotes Emergency Recovery
- ☐ Addresses projected water supply demand indentified by Cities/County

Positive Interaction (E 4) - Check all that apply

- ☐ With the Community
- ☐ With other agencies

ENVIRONMENTAL SUSTAINABILITY (7.5%)

Water Quality (E 3.2) - Check if applicable — 0

- ☐ Promotes drinking water quality
- ☐ Protects Ground Water
- ☐ Protects Surface Water
- ☐ Addresses Storm Water issues

Natural Resources Sustainability (E 3.2) - Check all that apply

- ☐ Promotes water use efficiency
- ☐ Reduces reliance on imported water
- ☐ Promotes stream management
- ☐ Encourages Water Conservation
- ☐ Protects Upland or Wetland Habitat
- ☐ Expands or Improves Fish Habitat
- ☐ Includes Climate Change Elements
- ☐ Promotes energy efficiency or incorporates energy efficient features

---

COST RECOVERY (10%)

Lifecycle costs are minimized - Check One — 0

- ☐ Annual cost savings of more than $500,000
- ☐ Annual cost savings of $200,000 to $500,000
- ☐ Annual cost savings of less than $200,000 (reference ½ PY)

Funding Available from Other Agencies - Check One

- ☐ Over 50% of project costs available from other agencies
- ☐ 26% to 50% of project costs available from other agencies
- ☐ Up to 25% of project costs available from other agencies

FLOOD PROTECTION PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)

Flood Protection (E 3) — 0

I P

☐ ☐ Project restores existing watershed infrastructure to its intended level of flood protection.
I = Impact on home, school, or business parcels (H = 1000+, M = 200 to 1000 , L = <200);
P = Probability based on frequency of flooding (H = every 10 yrs, M = every 25 yrs, L = every 50+ yrs)

☐ Project is a Board or USACE priority, improves watershed infrastructure to achieve the committed level of flood protection, or provides flood protection beyond the level of commitment. **(H, M, L)**

☐ Timing of when the flood protection benefit will be realized by the community.
I = Immediate (0-3 years); S = Short-term (3-5 years); L - Long-term (more than 5 years)

COMMUNITY ENGAGEMENT (10%)

Positive Interaction (E 4) - Check all that apply — 0

☐ With the Community
☐ With other agencies
☐ Environmental Justice

Good Neighbor (E 4) - Check all that apply

☐ Graffiti removal or Prevention Features
☐ Improves aesthetics of project location
☐ Trash removal features (vortex weirs)

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.1, 4.1) — 0

☐ Project incorporates at least one of the following: removal of fish barrier; structural improvements to fish habitat; inclusion of riparian habitat (planting, setback or protect in place); inclusion of SRA plantings and/or features designed to improve water temperature; improvements to facilitate habitat connectivity, upland habitat and/or wetland habitat protection or preservation; or reduction of hardscape elements.

Physical Function (E 3.2)

☐ Project incorporates at least one of the following: a holistic watershed approach; energy efficiency; geomorphic design elements; erosion control (sediment source reduction); floodplain connectivity; or protection from sea level rise.

Water Quality and Supply (E 3.2)

☐ Project incorporates TMDL improvements or provides opportunity for recharge

Trails & Open Space (E4.2, E4.3) - Check all that apply

☐ Project incorporates trail friendly features, provides protection or preservation of open space, or provides/improves Bicycle Commute Route

COST RECOVERY (15%)

Funding Available from Other Agencies - Put an "X" in the % column based on the percenatage eligible for cost sharing; Put an "H", "M", or "L" in the C column based on the level of confidence — 0

% C

☐ ☐ 50% or more of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ 26% to 49% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ Up to 25% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

WATER RESOURCES STEWARDSHIP PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (55%)

Stewardship Projects — 0

- ☐ A — Project creates Stewardship features to achieve stewardship commitments. **(H, M, L)**
- ☐ B — Stewardship activities beyond the current commitment. **(H, M, L)**

COMMUNITY ENGAGEMENT (15%)

Positive Interaction (E 4) - Check all that apply — 0

- ☐ With the Community
- ☐ Environmental Justice
- ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

- ☐ Graffiti removal or Prevention Features
- ☐ Trash removal features (vortex weirs)
- ☐ Improves aesthetics of project location
- ☐ Promotes water conservation

Education Element

- ☐ Promotes stream stewardship
- ☐ Promotes flood protection
- ☐ Promotes Bay protection

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.2) - Check all that apply — 0

- ☐ Fish Barrier Removal / Structural or nonstructural improvement to fish habitat
- ☐ Riparian Habitat (planting, setback or protect in place)
- ☐ SRA Plantings or Improved water temperature
- ☐ Upland Habitat Protection/Preservation
- ☐ Wetland Habitat Protection/Preservation
- ☐ Hardscape Reduction

Physical Stream Function (E 3.2) - Check all that apply

- ☐ Holistic Watershed Approach
- ☐ Geomorphologic Design Elements
- ☐ Erosion Control or Sediment Source Reduction

Water Quality (E 3.2) - Check all that apply

- ☐ Storm Water Treatment (pervious pavement, green roofs, etc.)
- ☐ TMDL Improvements
- ☐ Hazardous Material Removal (Asbestos, Lead, Hydrocarbons, etc.)

Trails & Open Space (E3.3) - Check all that apply

- ☐ Trail friendly features
- ☐ Provides/Improves Bicycle Commute Route
- ☐ Open Space Protection / Preservation
- ☐ Climate change elements

COST RECOVERY (15%)

Funding Available from Other Agencies - Check One — 0

%	C	
☐	☐	Over 50% of project costs available from other agencies
☐	☐	26% to 50% of project costs available from other agencies
☐	☐	Up to 25% of project costs available from other agencies

% = Percentage of cost provided; C = Confidence Level (H, M, L)

BUILDINGS & GROUNDS PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)

Buildings and Grounds (EL 3.4) 0

	I	P	
A	☐	☐	Project maintains or replaces existing building infrastructure to provide continuous housing of existing functions and/or to comply with employer safety standards. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project enhances building infrastructure to address treatment of staff issues.
C	☐		Project positions the District to meet projected future space needs.

COMMUNITY ENGAGEMENT (10%)

Positive Interaction (E 4) - Check all that apply 0

- ☐ With the Community
- ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

- ☐ Graffiti removal or Prevention Features
- ☐ Trash removal features (vortex weirs)
- ☐ Improves esthetics of project location

ENVIRONMENTAL SUSTAINABILITY (15%)

Natural Resources Sustainability (E 3.2) - Check all that apply 0

- ☐ Air Quality & Visibility Improvement
- ☐ Energy Efficient Features (Lighting, HVAC, maximize daylight use, etc.)
- ☐ Renewable Energy Use
- ☐ Water Efficient Features: Plumbing fixtures, Landscaping, etc.
- ☐ Recycled Water, rain water or gray water utilized
- ☐ Construction Site Waste Management
- ☐ Recycle/Re-use Solid Waste
- ☐ Reduce Solid Waste Production
- ☐ Use of Recycled or Alternative Building Materials

Trails & Open Space (E3.3) - Check all that apply

- ☐ Trail friendly features
- ☐ Provides/Improves Bicycle Commute Route
- ☐ Open Space Protection / Preservation

COST RECOVERY (15%)

Funding Available from Other Agencies (Grants & Cost-share) - Check One 0

- ☐ Over 50% of project costs available from other agencies
- ☐ 26% to 50% of project costs available from other agencies
- ☐ Up to 25% of project costs available from other agencies

INFORMATION TECHNOLOGY PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = **0**

Project Name

SCORE = 0

PRIMARY OBJECTIVE (75%)

Information Technology (EL 7.5) — 0

	I	P	
A	☐	☐	Project maintains existing mission critical software systems and/or Information Technology infrastructure to improve reliability for business continuity; protection of intellectual property information and files from loss or damage. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project enhances mission critical software systems and/or IT infrastructure to improve user functionality. **(H, M, L)**
C	☐		Project enhances mission critical software systems and/or IT infrastructure to meet projected future needs. **(H, M, L)**
D	☐		Ties into IT Master Plan finding and/or recommendations (10 pts.)

COMMUNITY ENGAGEMENT (15%)

Good Neighbor - Check all that apply — 0

- ☐ Program promotes the distribution of information to the community (public transparency)
- ☐ Program provides an opportunity for community interaction with the District.

COST RECOVERY (10%)

Funding Available from Other Agencies - Check One — 0

- ☐ Over 50% of project costs available from other agencies
- ☐ 26% to 50% of project costs available from other agencies
- ☐ Up to 25% of project costs available from other agencies

Appendix A - CIP Priority Criteria

This page intentionally left blank.

Appendix B - Project List By Priority

Water Supply Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-18 to Completion)	Phase
100	Anderson Dam Seismic Retrofit	$444,547	$412,961	Plng/Des
92	Dam Seismic Stability Evaluation	$19,776	$2,035	Plng
92	Calero and Guadalupe Dams Seismic Retrofits	$159,615	$135,716	Plng/Des
91	RWTP Reliability Improvement	$290,883	$174,196	Construction
84	RWTP FRP Residuals Management Modifications	$51,716	$20,217	Construction
84	RWTP Treated Water Valves Upgrade	$8,939	$379	Construction
83	Penitencia Delivery Main/Force Main Seismic Retrofit	$35,261	$674	Construction
78	10-Year Pipeline Rehabilitation	$97,228	$97,228	Plng/Des
76	Small Capital Improvements, San Felipe Reach 1-3	$33,084	$29,476	Continuing
75	Pacheco/Santa Clara Conduit Right of Way Acquisition	$4,818	$3,462	Des
75	Pacheco Conduit Inspection and Rehabilitation	$7,031	$3,721	Construction
74	PWTP Residuals Management	$10,000	$10,000	Plng
74	SCADA Remote Architecture & Communications Upgrade	$7,027	$6,543	Plng
73	Small Capital Improvements, Raw Water Transmission	$3,754	$3,754	Continuing
73	Small Capital Improvements, Water Treatment	$48,716	$45,500	Continuing
73	Small Capital Improvements, Treated Water Transmission	$144	$144	Continuing
73	FAHCE Implementation	$145,108	$145,108	Plng
71	Expedited Purified Water Program	$638,611	$619,346	Plng/Des
71	Long-Term Purified Water Program Elements	$355,300	$355,300	FY23
70	Coyote Pumping Plant ASD Replacement	$16,251	$16,251	FY19
70	Main & Madrone Pipelines Restoration	$17,707	$14,919	Des
67	IRP2 WTP Ops Bldgs Seismic Retrofit	$22,505	$346	Const/Close
67	Vasona Pumping Plant Upgrade	$20,922	$20,872	Plng
66	PWTP Clearwell Recoating & Repair	$6,450	$278	Const/Close
62	IRP2 Additional Line Valves	$11,796	$11,796	Plng
61	Wolfe Road Recycled Water Pipeline	$15,026	$340	Const/Close
52	South County Recycled Water Pipeline	$46,926	$22,400	Des/Const
50	Almaden Dam Improvements	$59,594	$46,935	Plng/Des
48	Coyote Warehouse	$6,390	$5,606	Des/Const
47	Fluoridation at WTPs	$10,161	$333	Construction
LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS				
72	Dam Seismic Retrofit at 2 Dams (Chesbro & Uvas)	$89,500	$89,500	N/A
62	SCADA Small Capital Improvements	$19,612	$19,612	N/A
32	South County Recycled Water Reservoir Expansion	$7,000	$7,000	N/A
28	Alamitos Diversion Dam Improvements	$3,183	$2,345	On Hold
28	Coyote Diversion Dam Improvements	$2,461	$2,138	On Hold
25	Land Rights - South County Recycled Water PL	$5,816	$5,816	N/A

Appendix B - Project List By Priority

Flood Protection Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-18 to Completion)	Phase
98	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	$101,952	$3,041	Construction
83	Cunningham Flood Detention Certification	$10,734	$2,981	Construction
78	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	$58,946	$14,103	Des/Const
76	Berryessa Creek, Calaveras Boulevard to Interstate 680	$57,610	$3,272	Design
74	San Francisco Bay Shoreline (E7)	$48,306	$24,380	Des/Const
74	Watersheds Asset Rehabilitation Program	$66,851	$63,944	Plng/Des/Const
70	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	$171,998	$107,435	Construction
68	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	$132,827	$30,702	Des/Const
68	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	$184,051	$84,001	Des/Const
66	Upper Penitencia Creek, Coyote Creek to Dorel Drive	$63,706	$50,020	Plng/Des
65	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	$15,358	$10,787	Design
65	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	$28,041	$20,221	Des/Const
65	Sunnyvale East and West Channels	$68,481	$53,009	Construction
63	San Tomas Creek, Quito Road Bridge Replacement	$687	$125	Const/Close
62	Permanente Creek, SF Bay to Foothill Expressway	$92,430	$17,934	Construction
62	Coyote Creek, Montague Expressway to Interstate 280	$36,586	$25,732	Plng
56	Palo Alto Flood Basin Tide Gate Structure Improvements	$1,658	$692	Construction

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

74	SF Bay Shoreline EIA 11 (Construction)	$35,000	$35,000	N/A
68	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 3	$50,000	$50,000	N/A
58	Watersheds Asset Rehabilitation Program - Unfunded Work	$104,051	$104,051	N/A
56	Permanente Creek, Hale Creek Construction	$16,525	$16,525	N/A

Appendix B - Project List By Priority

Water Resources Stewardship Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-18 to Completion)	Phase
	Mitigation (All Mitigation projects are required per CEQA or other Regulation and therefore do not receive a score)			
	SMP Mitigation, Stream and Watershed Land Preservation	$16,733	$510	Continuing
	Environmental Enhancement & Stewardship			
	Lower Peninsula Watershed			
77	Hale Creek Enhancement Pilot Study	$4,924	$4,247	Const/Close
72	FAHCE Stevens Creek Fish Passage Enhancement	$5,740	$4,890	Plng
	Guadalupe Watershed			
85	Almaden Lake Improvements	$4,660	$1,511	Des
	Multiple Watersheds			
80	SCW Fish Passage Improvements	$6,301	$2,852	Des/Const
75	SCW Implementation Fund	$62,911	$62,911	Plng
50	Salt Ponds A5-11 Restoration	$8,505	$4,272	Plng/Des
43	South Bay Salt Ponds Restoration	$4,112	$3,626	Plng
	Feasibility Studies			
N/A	Watershed Habitat Enhancement Studies	$2,376	$2,286	N/A

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

85	Almaden Lake Improvements - Construction	$17,585	$17,585	N/A
47	Permanente Creek Riparian Channel Restoration	$5,989	$5,989	N/A

Appendix B - Project List By Priority

Buildings and Grounds Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-18 to Completion)	Phase
73	Almaden and Winfield Campus, Small Capital Improvements	$40,180	$38,118	Continuing
70	Winfield Capital Improvements	$2,051	$0	On Hold
65	Headquarters Operations Building	$17,819	$17,794	FY19

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

70	Fleet and Facility Annex Improvements	$4,719	$4,719	$0

Information Technology Capital Projects in Order of Priority

FUNDED

FY18 Priority	Name	Total Project Value ($K)	Remaining Cost ($K) (FY-18 to Completion)	Phase
63	PeopleSoft System Upgrade & Expansion	$18,458	$12,959	Construction
56	E-Discovery Management System	$550	$545	Plng/Des/Const
54	Software Upgrades & Enhancements	$18,529	$17,302	Construction
46	IT Disaster Recovery	$2,396	$442	Construction
46	WTP-WQL Network Equipment	$12,854	$11,954	Construction
44	Boardroom Technology Upgrade	$818	$818	Plng/Des/Const
34	Data Consolidation	$1,210	$989	Construction

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

None

Appendix C - District Partnership Summary

Partnership Reimbursements are funds that are reimbursed by the District's partners after the District advances the needed funds. The following table identifies capital projects that are funded cooperatively with the District's partners through reimbursements.

Partnership Reimbursement

Reimbursements for Current Projects ($K)		Actuals																	
Project Number	Project Name / Agency	Thru FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	Total
91C40377	Coyote Pumping Plant ASD Replacement Total	0	0	0	156	413	2,044	1,072	0	0	0	0	0	0	0	0	0	0	3,685
	San Benito Water Dist	0			156	413	2,044	1,072											3,685
91214010	Small Capital Improvements, San Felipe - Rch 1 Total	882	311	329	530	185	0	0	17	0	242	88	66	407	110	116	116	0	3,399
	San Benito Water Dist	882	311	329	530	185	0	0	17	0	242	88	66	407	110	116	116	0	3,399
91214001	Pacheco Conduit Inspection & Rehabilitation Total	15	0	325	1,195	0	0	0	0	0	0	0	0	0	0	0	0	0	1,535
	San Benito Water Dist	15		325	1,195														1,535
92144001	Pacheco/Santa Clara Conduit ROW Acquisition Total	17	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	23
	San Benito Water Dist	17					6												23
92374005	SCADA Remote Architecture & Comm. Upg Total	0	0	34	69	105	41	40	206	187	195	203	211	219	33	0	0	0	1,542
	San Benito Water Dist	0	0	34	69	105	41	40	206	187	195	203	211	219	33				1,542
93084011	Fluoridation at WTPs Total	1,110	2,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,400
	The Health Trust	110	890																1,000
	First 5 of Santa Clara County	0	900																900
	California Dental Association Foundation	0	500																500
	Santa Clara County	1,000																	1,000
93764003	IRP2 WTP Ops Bldg Seismic Retrofit Total	633	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	704
	FEMA Grant (California Office of Environmental Services)	633	71																704
94384002	Penitencia Delivery Main Seismic Retrofit Total	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	417
	Department of Water Resources (A3904)	417																	417
92224001	Penitencia Force Main Seismic Retrofit Total	983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	983
	Department of Water Resources (A3904)	983																	983
91094007s	South County Recycled Water Pipeline Total	2,106	0	2,000	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	6,106
	SCRWA	811																	811
	USBR - ARRA	1,295																	1,295
	USBR - Title 16	0		2,000	2,000														4,000
91244001	Wolfe Road Recycled Water Pipeline Total	1,250	9,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,900
	Apple Computer	0	4,800																4,800
	Cal Water	150	1,350																1,500
	City of Sunnyvale	720	1,380																2,100
	DWR - Prop 84	380	2,120																2,500
26154001s	Guadalupe River–Upper, I-280 - Blossom Hill Rd Total	17,370	7,189	4,500	5,800	7,700	2,000	0	0	0	0	0	0	0	0	0	0	0	44,559
	State Subventions	13,585	7,189	4,500	5,800	7,700	2,000												40,774
	City of San Jose	3,785																	3,785
26174041s	Berryessa Ck, Calaveras Bvd to I-680 Total	292	3,944	8,890	3,558	0	0	0	0	0	0	0	0	0	0	0	0	0	16,684
	State Subventions	0	236	2,890	3,558														6,684
	DWR - Prop 1E	292	3,708	6,000															10,000
40174004	Berryessa Ck, Lwr Penitencia Ck - Calaveras Bvd Total	3,414	5,586	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,000
	DWR - Prop 1E	3,414	5,586	6,000															15,000
40264011	Cunningham Flood Detention Certification Total	0	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000
	DWR - Prop 1E	0		1,000															1,000
40334005	Lwr Penitencia Ck Imp, Berryessa to Coyote Cks. Total	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000
	DWR - Prop 1E	0	1,000	4,000															5,000
40264008s	Lwr Silver Ck, I-680 to Cunningham, Rchs 4-6 Total	26,940	9,258	12,000	4,865	0	0	0	0	0	0	0	0	0	0	0	0	0	53,063
	State Subventions	6,264	1,258	0	865														8,387
	DWR - Prop 1E	0	8,000	12,000	4,000														24,000
	NRCS-ARRA	20,676																	20,676
50284010	Llagas Ck–Lwr, Capacity Restoration Total	120	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120
	State Subventions	120	0	5,000															5,120
26174051s	Llagas Creek–Upr, Buena Vista to Wright Total	9,430	4,984	5,773	9,180	10,858	0	0	0	0	0	0	0	0	0	0	0	0	40,225
	State Subventions	6,089	4,984	5,773	9,180	10,858													36,884
	City of Morgan Hill	3,341																	3,341
	SUBTOTAL - Reimbursements from Current Projects	64,979	44,283	49,851	27,353	19,261	4,091	1,112	223	187	437	291	277	626	143	116	116	0	213,345

Appendix C - District Partnership Summary

Partnership Reimbursement (cont'd)

Pending Reimbursements for Closed Projects		Actuals																	
Project Number	Project Name / Agency	Thru FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	Total
91184008	Silicon Valley Advanced Water Purification Ctr Total	22,046	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,169
	City of San Jose	8,500																	8,500
	DWR - Prop 50	2,935																	2,935
	DWR - Prop 84	2,486	123																2,609
	USBR - ARRA	8,125																	8,125
30154013s	Guadalupe River–DT, I-880 to I-280 Total	39,480	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39,590
	State Subventions	27,618		110															27,728
	City of San Jose	1,654																	1,654
	San Jose Redev Agency	10,208																	10,208
	SUBTOTAL - Reimbursements for Closed Projects	61,526	123	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61,759
	TOTAL REIMBURSEMENTS	126,505	44,406	49,961	27,353	19,261	4,091	1,112	223	187	437	291	277	626	143	116	116	0	275,104

Appendix C - District Partnership Summary

Partnership Funding is funds that are made available by the District's partners, when needed. The following table identifies capital projects that receive partnership funding. This may occur through either cost sharing agreements or as in-kind services.

Partnership Funding

Project Number	Project Name	Amount ($K)	Partnering Agency
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	13,600	U.S. Army Corps of Engineers
26154001s	Guadalupe River–Upper, Interstate 280 to Blossom Hill Road	188,000	U.S. Army Corps of Engineers
26174051s	Llagas Creek–Upper, Buena Vista Road to Wright Avenue	65,000	U.S. Army Corps of Engineers
00044026s	San Francisco Bay Shoreline	91,250	USACE, Coastal Conservancy, US Fish & Wildlife, CA Wildlife Conservation, Packard-Hewlett-Goldman-Moore Foundations
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	3,000	U.S. Army Corps of Engineers
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	8,000	San Francisquito Joint Powers Authority (DWR)
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	1,500	County of San Mateo
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	City of Saratoga
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	Town of Los Gatos
20194005	San Tomas Creek, Quito Road Bridge Replacement	4,115	CALTRANS
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	102,720	U.S. Army Corps of Engineers
	TOTAL	$ 477,785	

Appendix C - District Partnership Summary

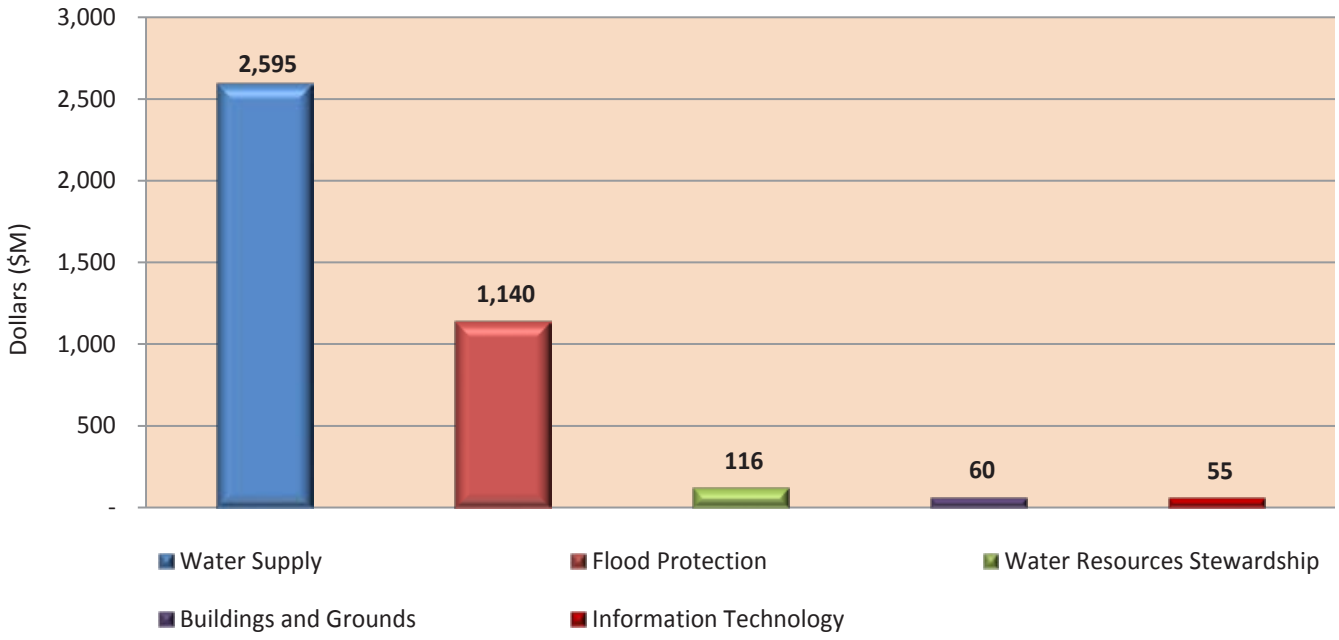
This page intentionally left blank.

Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Type of Improvement ($K)

	THRU FY16 (Actuals)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28-32	TOTAL
Water Supply	284,909	104,541	135,916	131,923	345,902	228,185	289,763	392,180	237,761	241,264	168,881	14,883	19,178	2,595,286
Flood Protection	486,621	141,222	141,318	141,298	82,201	58,720	32,667	23,751	20,393	11,014	702	315	-	1,140,222
Water Resources Stewardship	21,668	7,489	14,975	30,004	16,063	2,405	2,490	2,577	2,368	2,463	2,562	2,664	8,534	116,262
Buildings and Grounds	1,749	2,389	1,690	4,279	6,017	9,209	7,191	2,395	2,468	2,544	2,621	2,701	14,797	60,050
Information Technology	4,562	5,244	14,419	4,672	1,044	965	541	4,006	4,735	1,409	946	731	11,541	54,815
TOTAL	799,509	260,885	308,318	312,176	451,227	299,484	332,652	424,909	267,725	258,694	175,712	21,294	54,050	3,966,635

CIP Expenditures by Type of Improvement

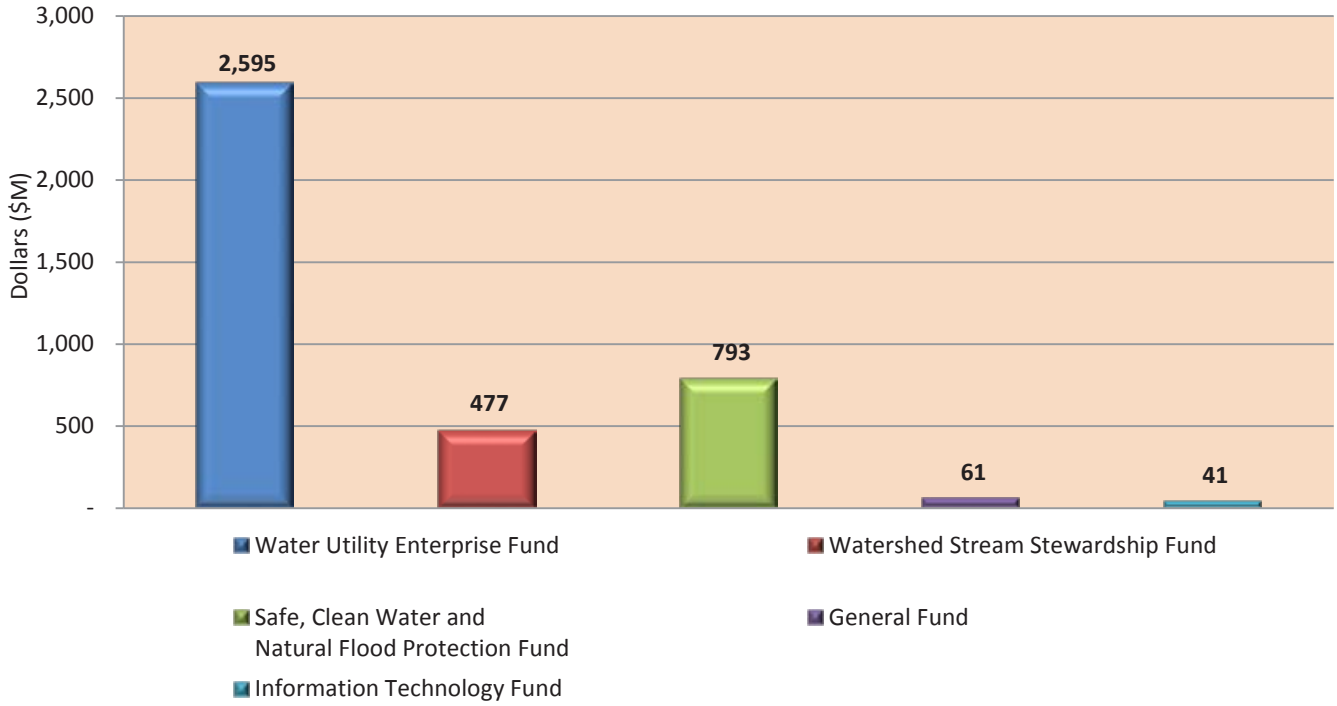


Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Fund ($K)

	THRU FY16 (Actuals)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28-32	TOTAL
Water Utility Enterprise Fund	285,203	103,124	123,344	134,335	348,820	227,673	281,452	394,459	241,782	243,001	170,062	15,925	25,559	2,594,739
Watershed Stream Stewardship Fund	253,907	45,479	33,764	61,563	17,163	17,572	19,188	15,935	6,785	821	854	888	2,845	476,764
Safe, Clean Water and Natural Flood Protection Fund	254,796	104,841	136,422	107,882	78,381	44,066	24,383	9,726	15,186	11,835	1,556	1,203	2,845	793,122
General Fund	2,948	2,389	1,690	4,279	6,017	9,209	7,191	2,395	2,468	2,544	2,621	2,701	14,797	61,249
Information Technology	2,655	5,052	13,098	4,117	846	965	438	2,394	1,503	493	619	577	8,005	40,762
TOTAL	799,509	260,885	308,318	312,176	451,227	299,484	332,652	424,909	267,725	258,694	175,712	21,294	54,050	3,966,635

CIP Expenditures by Fund



Appendix E - Safe Clean Water Project Schedules

The following tabel is an overview schedule for water supply capital projects identified in the FY 2018-22 CIP. Detailed information for each project can be found in this document in their respective chapters in the order presented in this table.

Safe, Clean Water Capital Improvement Project Schedules

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	WATER SUPPLY							
26C40349	IRP2 Additional Line Valves (A3)							
26564001	Main & Madrone Pipelines Restoration (A1)							
	FLOOD PROTECTION							
10244001	Permanente Creek, SF Bay to Foothill Expressway							
26244001	Permanente Creek, SF Bay to Foothill Expressway							
10284007	San Francisquito Creek, SF Bay thru Searsville Dam							
10284008	San Francisquito Creek, Early Implementation							
26284001	San Francisquito Creek, SF Bay thru Searsville Dam (E5)							
26284002	San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)							
26074002	Sunnyvale East and West Channels							
26154001	Guadalupe Rv–Upper, Fish Passage Mods							
26154002	Guadalupe Rv–Upper, I-280 to SPRR (R6)							
26154003	Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)							
26154004	Guadalupe Rv–Upper, Actuals chg to other proj numbers							
26174041	Berryessa Ck, Calaveras-I-680 - Corps							
26174042	Berryessa Ck, Calaveras-I-680 - Reimbursable							
26174043	Coyote Creek, Montague Expressway to Interstate 280							
40324003	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps							
40324005	Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs							
26324001	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)							
26174051	Llagas Creek–Upper, Reimbursable (E6b)							
26174052	Llagas Creek–Upper, Corps Coordination (E6a)							
26174053	Llagas Creek–Upper, Technical Studies							
26174054	Llagas Creek–Upper, Design							
50C40335	Llagas Creek–Upper, R5,6,&7b							

Appendix E - Safe Clean Water Project Schedules

Safe, Clean Water Capital Improvement Project Schedules (cont'd)

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	FLOOD PROTECTION (cont'd)							
00044026	San Francisco Bay Shoreline							
62044042	Shoreline Early Implementation							
26444001	San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)							
26444002	San Francisco Bay Shoreline - Other EIAs Planning (E7)							
	WATER RESOURCES STEWARDSHIP							
26044001	Almaden Lake Improvements (D4.1a)							
26164001	Hale Creek Enhancement Pilot Study (D6)							
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)							
26444003	South Bay Salt Ponds Restoration (D8)							

Legend

- Planning Phase
- Design Phase
- Construction Phase
- Close-out Phase

Appendix F - Glossary

Ad Valorem Tax
A tax based on value (e.g., a property tax).

Appropriation
An appropriation is a legal authorization granted by the Santa Clara County Board of Supervisors which allows the District to expend cash and incur obligations for specific purposes. An appropriation is usually limited in amount and the time it may be expended.

Assessment
The process of setting the official valuation of property for taxation; the valuation placed upon property as a result of this process.

Asset
A probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events. Examples of assets are cash, receivables, and equipment.

Benefit Assessment
Determination of the benefits derived from District activities within particular watersheds and levying a proportionate share of taxes to each parcel subject to voter-approved limitations.

Bonds
Bonds are a long-term source of debt that provides a source of borrowed monies that can be used to pay for specific capital facilities. Bonds are a written promise to pay a specified sum of money at a predetermined date or dates in the future, called the maturity date(s), together with periodic interest at a specific rate.

Capital Expenditure
Capital expenditures fall into several categories. In general, they should create assets or extend the useful lives of existing assets. The work product results in a long-term benefit greater than two years and for budgeting purposes involved a major expenditure of district resources greater than $50,000. They can be made with regard to tangible and intangible assets.

The general categories of capital expenditures are: rehabilitation, major repairs, improvements/ betterments/ upgrades, replacements, expansions/ additions, and ancillary expenditures.

Capital Projects
Projects are budgeted within the Capital budget and fall within the definition of Capital Expenditures; which means they (1) create or extend the life of an asset, (2) their work products have a useful life of greater than two years, and (3) they involve an expenditure of District resources in excess of $50,000.

Certificates of Participation (COPs)
A security in the general form of a bond, which evidences a proportionate participation in a flow of lease or other payments between two parties.

CEQA
California Environmental Quality Act

CIP
Capital Improvement Program

Cost Center
Cost Centers are separate financial accounting centers in which costs are accumulated because of legal and accounting requirements, the first two digits of a project number identifies the cost center.

DPR
Direct Potable Reuse

DWR
State Department of Water Resources

EIR
Environmental Impact Report

Encumbrances
Commitments related to unperformed (executory) contracts for goods or services. Encumbrances represent the estimated amount of expenditures that will result if unperformed contracts in process are completed.

Appendix F - Glossary

Enterprise Fund
Enterprise Funds are used to account for operations including debt service (a) that are financed and operated in a manner similar to private business, where the intent of the government body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a accounting basis is financed or recovered primarily though user charges; or (b) where the governing body has determined that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control accountability, or other purposes.

Expenditure/Expense
Decreases in net financial resources. Expenditures include current operating expenses requiring the present or future of net current assets, debt service and capital outlays, and intergovernmental grants, entitlements, and shared revenues. The major expenditure categories used by the District are labor and overhead, land and structures, equipment, and debt service.

Facility
Defined as a creek, reservoir, dam, water treatment plant, pipeline, canal, etc.

Fixed Assets
Fixed Assets are defined as long-lived tangible assets such as automobiles, computers and software, furniture, communications equipment, hydrologic equipment, office equipment, and other equipment, with a value of $2,000 or more, or the combined value of like or related units (aggregate value) is greater than $5,000 if the unit value is less than $2,000.

Fiscal Year
A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. The District's fiscal year is July 1 through June 30.

Fund
A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

General Fund
A fund used to account for major operating revenues and expenditures, except for those financial transactions that are required to be accounted for in another fund. General Fund revenues are derived primarily from property and other taxes.

Grants
Contributions or gifts of cash or other assets from another government entity to be used or expended for a specified purpose, activity, or facility.

HVAC
Heating, Ventilation, and Air Conditioning

IPR
Indirect Potable Reuse

Levy
(1. Verb) To impose taxes, special assessments, or service charges for the support of government activities; (2. Noun) The total amount of taxes, special assessments, or service charges imposed by a government agency.

Long-Term Debt
Debt with a maturity date of more than one year after the date of issuance.

MGD
Million Gallons per Day

Appendix F - Glossary

One Percent Flood or 100 Year Flood

Has a 1% chance of occuring in a given year. Water District projects are usually designed for the 1% flood, a national standard established by the Federal Emergency Management Agency (FEMA).

Operating Expenditure

Operating expenditures are system costs required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services.

Operating expenditures are costs necessary to maintain the systems in good operating condition. This includes the repair and replacement of minor property components. The American Waterworks Association (AWWA) says that these priority components should be smaller than a retirement unit; a retirement unit is a readily separable and separately useful item that is part of a larger assembly. The benefit and life of such repairs should be less than two years. Any repairs that recur on an annual basis are considered operating activities of a maintenance nature.

Operating expenditures are often separated into fixed and variable costs for purposes of understanding operating leverage and structuring service charge rates.

Operations

Expenditures required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services. Operations include work that is generally of an ongoing or recurring nature. Any District work that is not a project is, by definition, an Operation. Operations, although recurring, require close coordination and a high degree of management oversight; however, they can be accomplished without the application of the full range of tools and processes used for managing projects.

Projects

At the Santa Clara Valley Water District, a project is any undertaking which has (1) a beginning and an ending, (2) a one-time occurrence. Projects can require expenditure of capital or operating funds and, at the District, are called Capital or Operating Projects, accordingly. Project usually, but no always, relate to a District facility or facilities (a creek, a reservoir, a dam, a water treatment plant, a pipeline,, etc.). Projects may include studies, design, construction, maintenance, or implementation of systems such as Records Management or Financial Management System.

Revenue

Monies the District receives in exchange for services or sales provided. Revenue items include water sales, property tax revenues, benefit assessment revenues, interest income, intergovernmental reimbursement, and other.

Revenue Bonds

Bonds, whose principal and interest are payable exclusively from earnings of an enterprise fund. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprise fund's property.

Reserve

An account used to indicate that a portion of a fund's assets are legally restricted for a specific purpose and is, therefore, not available for general appropriation.

WTP

Water Treatment Plant

WQL

Water Quality Lab

Appendix F - Glossary

This page intentionally left blank.